

SADSAC SPACE SHUTTLE AEROTHERMODYNAMIC DATA MANAGEMENT SYSTEM

CONTRACT NAS8-4016
MARSHALL SPACE FLIGHT CENTER



-SPACE SHUTTLE-

AERODYNAMIC STABILITY, CONTROL EFFECTIVENESS AND DRAG CHARACTERISTICS OF A SHUTTLE ORBITER CONFIGURATION AT MACH NUMBERS FROM 0.6 TO 4.96

by

Paul E. Ramsey, NASA/MSFC

MSFC 14 × 14-INCH TRISONIC WIND TUNNEL

> Marshall Space Flight Center

> > NASA

This document should be referenced as NASA CR-120,070 NASA Series Number: FA3

DMS-DR-2005 CR-120,070 NOVEMBER, 1972

SADSAC/SPACE SHUTTLE

WIND TUNNEL TEST DATA REPORT

CONFIGURATION:	NR ATP Baseline Orbiter (.004 Scale Model)				
TEST PURPOSE:	Static Stability and Control Effectiveness of a Shuttle				
	Orbiter				
TEST FACILITY:	NASA/MSFC 14 x 14 - Inch Trisonic Wind Tunnel				
TESTING AGENCY:	MSFC				
TEST NO. & DATE:	MSFC TWT 555 - 96 Hours				
FACILITY COORDIN	ATOR: Jim Weaver, S&E-AERO-AAE				
PROJECT ENGINEER	(S): Paul E. Ramsey				
	,				

DATA MANAGEMENT SERVICES

DATA OPERATIONS:

RELEASE APPROVAL:

FOR N. D. Kemp, Supervisor

Aero Thermo Data Group

CONTRACT NAS 8-4016

AMENDMENT 174

DRL 297 - 84a

This report has been prepared by Chrysler Corporation Space Division under a Data Management Contract to the NASA. Chrysler assumes no responsibility for the data presented herein other than its display characteristics.

COGNIZANT TEST PERSONNEL

FACILITY COORDINATOR:

Mr. Jim Weaver Marshall Space Flight Center Mail Stop S&E-AERO-AAE Huntsville, Alabama 35801

Phone: (205) 453-2512

PROJECT ENGINEER:

Mr. Paul E. Ramsey Marshall Space Flight Center Mail Stop S&E-AFRO-AAE Huntsville, Alabama 35801

Phone: (205) 453-2517

SADSAC LIAISON:

Mr. V. W. Sparks Chrysler Huntsville Division Dept. 4820 102 Wynn Drive Huntsville, Alabama 35805 Phone: (205) 895-1560

SADSAC OPERATIONS:

Mr. J. L. Glynn Chrysler Corporation Space Division Dept. 2780 P. O. Box 29200 New Orleans, Louisiana 70129

Phone: (504) 255-2304

TABLE OF CONTENTS

		PAGE
ABSTRACT		2
NOMENCLATU	RE	3
CONFIGURAT	TONS INVESTIGATED	7
TEST FACIL	ITY DESCRIPTION	9
DATA REDUC	TION	10
TABLES:		
I	TEST CONDITIONS	12
II	DATA SET COLLATIONS	13
III	DIMENSIONAL DATA	16
IV	INDEX OF MODEL FIGURES	24
٧	INDEX OF DATA FIGURES	25
FIGURES		
MODE	L	27
DATA		32
APPENDIX TABU	LATED SOURCE DATA LISTING	

AERODYNAMIC STABILITY, CONTROL EFFECTIVENESS AND DRAG CHARACTERISTICS OF A SHUTTLE ORBITER CONFIGURATION AT MACH NUMBERS FROM

0.6 TO 4.96

By Paul E. Ramsey

ABSTRACT

Experimental aerodynamic investigations were conducted in the NASA/MSFC 14-inch Trisonic Wind Tunnel from Sept. 27 to Oct. 7, 1972 on a 0.004 scale model of the NR ATP baseline shuttle orbiter configuration. Six component aerodynamic force and moment data were recorded at 0° sideslip angle over an angle of attack range from 0° to 20° for Mach numbers of 0.6 to 4.96, 20° to 40° for Mach numbers of 0.6, 0.9, 2.99, and 4.96, and 40° to 60° for Mach numbers of 2.99 and 4.96. Data were obtained over a sideslip range of -10° to 10° at 0°, 10°, and 20° angles of attack over the Mach range and 30° and 50° at Mach numbers of 2.99 and 4.96.

The purpose of the test was to define the buildup, performance, stability, and control characteristics of the orbiter configuration. The model parameters were: body alone; body-wing; body-wing-tail; elevon deflections of 0, 10, -20, and -40 (both full and split); aileron deflections of +10 (full and split); rudder flares of 10 and 40, and a rudder deflection of 15 about the 10 and 40 flare positions.

NOMENCLATURE General

SYMBOL	SADSAC SYMBOL	DEFINITION
9 ·		speed of sound; m/sec, ft/sec
c_p	CP	pressure coefficient; $(p_l - p_{\infty})/q$
М	MACH	Mach number; V/a
· p		pressure; N/m ² , psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2 \rho V^2$, N/m^2 , psf
RN/L	\mathtt{RN}/\mathtt{L}	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
$oldsymbol{\phi}$	PHI	angle of roll, degrees
ρ		mass density; kg/m ³ , slugs/ft ³
	Ref	erence & C.G. Definitions
Ab		base area; m ² , ft ²
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
$m{\ell}_{ ext{REF}}$	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m^2 , ft^2
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis
SUBSCRIPT	<u>'S</u>	
b		base
1		local
S		static conditions total conditions
t ø		free stream
3		TICC DOTCOM

NOMENCLATURE (Continued)

Body-Axis System

SYMBOL	SADSAC SYMBOL	DEFINITION
c_{N}	CN	normal-force coefficient; $\frac{\text{normal force}}{q^{S}}$
C_{A}	CA	axial-force coefficient; $\frac{\text{axial force}}{q^S}$
$\mathrm{C}_{\mathtt{Y}}$	CY	side-force coefficient; $\frac{\text{side force}}{q^S}$
$^{\mathrm{CA}}{}_{\mathrm{b}}$	CAB	base-force coefficient; $\frac{\text{base force}}{q^S}$
		$-A_b(p_b - p_{\infty})/qS$
$^{\text{C}_{ ext{A}_{ extsf{f}}}}$	CAF	forebody axial force coefficient, c_{A} - $c_{A_{b}}$
$C_{\mathbf{m}}$	CLM	pitching-moment coefficient; pitching moment qs ℓ_{REF}
$C_{\tilde{t}1}$	CYN	yawing-moment coefficient; yawing moment qSb
C /	CBL	rolling-moment coefficient; rolling moment qSb
		Stability-Axis System
$^{ m C}_{ m L}$	CL	lift coefficient; $\frac{\text{lift}}{\text{qS}}$
$c_{\mathbb{D}}$	CD	drag coefficient; drag qS
$^{\mathrm{C}_{\overline{\mathbb{D}}_{b}}}$	CDB	base-drag coefficient; $\frac{\text{base drag}}{\text{qS}}$
$^{\mathrm{C}}_{\mathrm{D}_{\mathrm{f}}}$	CDF	forebody drag coefficient; C_D - C_{D_b}
$\mathbb{C}_{\mathtt{Y}}$	CY	side-force coefficient; $rac{ ext{side force}}{ ext{qS}}$
C_{IT}	CLM	pitching-moment coefficient; pitching moment qSLREF
C_{Ti}	CIN	yawing-moment coefficient; yawing moment qSb
$^{\circ}\!\ell$	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{\text{qSb}}$
\mathbf{L}/\mathbb{I}	3/3	lift-to-drag ratio; ${ ilde C_{ m L}}/{ ilde C_{ m D}}$

ADDITIONS TO NOMENCLATURE

FOR MSFC TEST 555

SYMBOL	SADSAC SYMBOL	DEFINITION
$oldsymbol{\delta}_{^{ ext{e}}}$ L	ELVN-L	Full left elevon, surface deflection angle, positive deflection, trailing edge down; degrees.
$oldsymbol{\delta}_{^{ ext{e}}}$ R	ELVN-R	Full right elevon, surface deflection angle, positive deflection, trailing edge down; degrees.
∂ e	ELEVTR	Full elevator only, surface deflection angle, positive deflection, trailing edge down; degrees.
$oldsymbol{\delta}_{ ext{e}}$		Left outboard elevon only, surface deflection angle, positive deflection, trailing edge down; degrees.
$oldsymbol{\delta}_{ ext{e}}$ RO		Right outboard elevon only, surface deflection angle, positive deflection, trailing edge down; degrees.
6 ₀	OBDELV	Outboard elevator only, surface deflection angle, positive deflection, trailing edge down; degrees.
b e _I	IBDELV	Inboard elevator only, surface deflection angle, positive deflection, trailing edge down; degrees.
$\boldsymbol{\delta}_{\mathrm{R}}$	RUDDER	Rudder, surface deflection angle, positive deflection, trailing edge to the left; degrees.
$oldsymbol{\delta}_{ ext{RF}}$	RUDFLR	Rudder flare, split rudder deflection angle, positive deflection, trailing edges outward; degrees.
ð a	AILRON	Aileron, full or outboard total aileron deflection angle, degrees, (left aileron-right aileron)/2.
δ _{aO}	OBDAIL	Outboard aileron, outboard total aileron deflection angle, degrees, (left aileron-right aileron)/2.

ADDITIONS TO NOMENCLATURE (CONTINUED)

SYMBOL	SADSAC SYMBOL	DEFINITION
δ_{a}	IBDAIL	Inboard aileron, inboard total aileron deflection angle, degrees, (left aileron-right aileron)/2.
	CONFIG	Configuration tested; = 1.0 (BlClDlFlMl) = 2.0 (BlClDlFlMl) (WlFl) = 3.0 (BlClDlFlMl) (WlFl) (VlKlRl)
(CI)TD WAX	CLLDMX	Lift coefficient evaluated at maximum L/D.
ACL	DCL	Lift coefficient variation for a specific change in elevon deflection.
ACUM	DCIM	Pitching moment variation for a specific change in elevon deflection.
Δůe	DE	Incremental change of elevon deflection.
(I/D) _{MAX}	L/DMAX	Maximum value of L/D.
Cy p	D(CY)	Derivative of side force coefficient with respect to beta (beta = ±5°); per degree.
^Ç n g	D(CAN)	Derivative of yawing moment coefficient with respect to beta (beta = ±5°); per degree, body axis system.
^C ₽ β	D(CBL)	Derivative of rolling moment coefficient with respect to beta (beta = $\pm 5^{\circ}$); per degree, body axis system.

CONFIGURATIONS INVESTIGATED

Test results reported herein were obtained on a 0.004 scale model of the NR ATP Baseline Orbiter. Each of the model components tested are listed below. Pertinent dimensional data for these components are given in Table III.

MODEL COMPONENT SYMBOL	DESCRIPTION
(BlcldlflMl)	Body Alone
B1 C1 D1 F1 M1	Orbiter body Canopy Manipulator fairing along top centerline Body flap OMS pods
(BlClDlFlMl) (WlEl)	Body With Wing
Wl El	Wing Split elevons
(BlClD1F1M1) (W1E1) (V1K1R1)	Body With Wing and Centerline Vertical
V1 K1 R1	Body centerline vertical tail Air scoop at base of vertical tail Split rudder

The following SADSAC names are used to define control deflection. The various elevon and rudder deflections tested and their SADSAC definition is also tabulated below.

ELEVIR	Inboard and outboard elevons deflected together
OBDELV	Outboard only elevons deflected
OBDAIL	Outboard only elevons deflected
RUDFLR	Rudder flare
RUDDER AILRON	Rudder deflection; with or without rudder flare Inboard and outboard elevons deflected together

CONFIGURATIONS INVESTIGATED (CONTINUED)

CONTROL SURFACE						NO	MENCLATU	TRE			
RUDDER	RUDDER F L ARE	E Lef		ONS RIG	HT	ELEVTR	OBDELV	AILRON	OBDAIL	RUDFLR	RUDDER
		INBOARD		INBOARD	OUTBOARD	∂ e	δe	ð a.	δa	$oldsymbol{\delta}_{ ext{RF}}$	$\delta_{ extbf{r}}$
0	10	10 10	Э	10	10	10	-	-	-	10	0
0	10	-20 -20	Э	-20	-50	-20	-	-	-	10	0
0	10	-40 -40	o	-40	-40	-40	-		-	10	0
0	10	0 -20	o	0	-20		- 20	-	-	10	0
0	10	10 10)	-10	-10	-	-	10	-	10	0
0	10	0 10)	0	-10	-	-	-	10	10	0
0	40	0, (o	0	0	_	-	-		40	0
15	40	0 (o	0	0	_	-	**		40	15
15	10	0 ()	0	0	<u>-</u>		-	-	10	15

TEST FACILITY DESCRIPTION

The Marshall Space Flight Center 14" x 14" Trisonic Wind Tunnel is an intermittent blowdown tunnel which operates by high pressure air flowing from storage to either vacuum or atmospheric conditions. A Mach number range from .2 to 5.85 is covered by utilizing two interchangeable test sections. The transonic section permits testing at Mach 0.20 through 2.50, and the supersonic section permits testing at Mach 2.74 through 5.85. Mach numbers between .2 and .9 are obtained by using a controllable diffuser. The range from .95 to 1.3 is achieved through the use of plenum suction and perforated walls. Mach numbers of 1.44, 1.93 and 2.50 are produced by interchangeable sets of fixed contour nozzle blocks. Above Mach 2.50 a set of fixed contour nozzle blocks are tilted and translated automatically to produce any desired Mach number in .25 increments.

Air is supplied to a 6000 cubic foot storage tank at approximately -40°F dew point and 500 psi. The compressor is a three-stage reciprocating unit driver by a 1500 hp motor.

The tunnel flow is established and controlled with a servo actuated gate valve. The controlled air flows through the valve diffuser into the stilling chamber and heat exchanger where the air temperature can be controlled from ambient to approximately 180°F. The air then passes through the test section which contains the nozzle blocks and test region.

pownstream of the test section is a hydraulically controlled pitch sector that provides a total angle of attack range of 20° ($\pm 10^{\circ}$). Sting offsets are available for obtaining various maximum angles of attack up to 90° .

DATA REDUCTION

All model forces and moments are resolved in the body and stability axis system and are presented in the form of non-dimensional coefficients. Model reference dimensions used in the data reduction are:

	FULL SCALE	MODEL SCALE
Reference Area (S _{ref})	3220.0 ft.	7.419 in. ²
Reference Length ($\ell_{ exttt{ref}}$) (M.A.C.)	525.5 in.	2.102 in.
Reference Span (bref) (Wing Span)	1007.7 in.	4.030 in.
Base Area (Ab) including cavity area, See Figure 4	382 ft. ²	0.878 in. ²
Cavity Area (A _C)	To a delicate the same of the	0.313 in. ²

Moments were referenced to the center of gravity at 65 percent body length ($\ell_{\rm B}$) from the nose ($\ell_{\rm B}$ = 5.312 in).

Moment reference dimensions used are:

	FULL SCALE	MODEL SCALE
XMRP	863.2 in.	3.453. in.
YMRP	0.0 in.	0.0 in.
ZMRP	0.0 in.	0.0 in.

DATA REDUCTION (CONTINUED)

The base axial force coefficient was calculated using:

$$CAB = -(CPBAVG) \frac{A_b - A_c}{S_{ref}} - (CPC) \frac{A_c}{S_{ref}}$$

where: CPBAVG = average base pressure coefficient = Pbavg - Po

CPC = cavity pressure coefficient =
$$\frac{P_c - P_{\infty}}{q}$$

Center of pressure ($X_{c \cdot p \cdot}$) calculations based on body length were made using:

$$\frac{\mathbf{x}_{\text{c.p.}}}{\boldsymbol{l}_{\text{B}}} = \frac{\mathbf{x}_{\text{c.g.}}}{\boldsymbol{l}_{\text{B}}} - \left(\frac{\mathbf{c}_{\text{m}}}{\mathbf{c}_{\text{N}}}\right) \left(\frac{\boldsymbol{l}_{\text{ref}}}{\boldsymbol{l}_{\text{B}}}\right)$$

where

$$X_{c.g.} = XMRP = 3.453 in.$$

$$\ell_{\text{ref}}$$
 = LREF = 2.102 in.

$$\ell_{\rm B}$$
 = body length = 5.312 in.

Transition grit was used on the model during the entire test. Figure 3 shows the type grit, location and grit thickness used.

TABLE I.
TEST CONDITIONS

TEST	TWT	555
------	-----	-----

MACH NUMBER	REYNOLDS NUMBER per unit length	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.6	5.0 x 10 ⁶ /FT.	4.3	100
0.9	6.3 "	7.4	
	6.7 ''	9.1	
1.96	6.8 "		•
2.99		10.3	100
4.96		5.2	140
4.90	4.9 ''	3.1	140
The state of the s			

BALANCE UTILIZED: MSFC # 231

CENTACTIE	CAPACITY:	
-----------	-----------	--

NF	120	lbs.
SF	50	lbs.
\mathbf{AF}	20	lbs.
PM	112	lbs.
ΥM	56	lbs.
RM	30	lhs

ACCURACY:

	0,60	lbs.
7	0.25	lbs.
	0.10	lbs.
- I	0.56	<u>in-l</u> bs
+	0.30	lbs.
	0.15	lbs.

COEFFICIENT TOLERANCE:

@_=_q_10_psi
+ 0.0035
± 0.0015
$\begin{array}{c} + & 0.0015 \\ - & 0.0035 \end{array}$
± 0,0020
+ 0.0009

COMMENTS:

TABLE II.

TESTMSFC TWT 555 DATA SET COLLATION SHEET

DATA SET	CONFIGU	IRATION	sc	HD.	PAR	MET	ERS/V	ALUE	s NO.	T	1	MACH	NUMBE	RS (OR	ALTER	NATE	INDE	PENDE		RIABL		
DENTIFIER			α	β	Sel	Sel	F 50 LC	SeR	oi O RUN	sδ	RF	5+				0.6	7		1.46			49
76101	BICIDIF	MI	A	0		_	_	_	6			_		A	C	54/0	A	052/0	A. p. a. 1	096/0		10 - 1 A . 11
102			B	0					4						6	64/0	063/0		†		009/0	010
103			C	0					2		T										205%	206
104	· · · · · · · · · · · · · · · · · · ·		0	D					4		1				0	65/0	066/0	067/0		099/0		 '
105			10	D				П	6									051/0	4	097/0	004/	003
106			20	D		П	\prod		6				 		- 6	70/0	069/0	068/0		098/0	005/	006
107			30	D				П	2	1						<u></u> -		/-		70		007
108	Y	1	50	D	Y	Y	TV	V	2				1								204/0	t
201	BIC, DIFI	MI (WIEI)	A	0	0	0	0	0	6						0	60/	05%	058/			019/0	
202			В	0		1	1	T	4	T	1 1				o	61/0	062/0	70			011/0	012
203			C	0					2		11	_				/0						199/
204			0	Ð			TT		4		1				0.	76/	075/	074/0		092/6	/0	-
205			10	D					6			\top	1		0	48/	047/0	046/2		094/0	018/	017
266			20	D					6	1		_			0	71/0	0/2/0	073/2		093/0		0/6
207			30	*					2	1		_	1			/-	70	70			0/4/0	013
208	*	, , , , , , , , , , , , , , , , , , ,	50						2	1,	, †	+	1 1								201/0	202
	3, CIDIFINIY	N.EI (V.K.R.)	A	0					6	70		0	1		103	55/	056/0	052/				121
302	ابرد		B	0		十			4		1	 -					131/0	/0		088/0	030/0	029
3 03			c	0		1			2			1	 			70	70					
304	*	· · · · · · · · · · · · · · · · · · ·	0	\mathcal{D}	V	T	4	V	4			+			07	77/	78/0	079/	<u> </u>	91/6		198/
1	7	13	19.		25	[,				37		L	. 3	49		55	701		********			-
CN	CLM	CY	CY	N	ح.	OL	سنافاه الكفاعنيس	CAF	.·····································	CA	B		C	C	D		/ D	61		67		75
COEFFICI	ENTS:		<u> </u>		<u></u>	الندر بالعيب				<u> </u>		<u>-</u> -		<u></u>			, ————————————————————————————————————		-			
α or β	<u> </u>	9:0°7020 C:40°7			ىرك	0	CB	<u>-</u> 2	0° 70	· 4	0 "	(0)	x = 2° U(D)	7				= [1])	PVAR(1	.) IDP	var(2) N

TEST MSFc 7W7 555 DATA SET COLLATION SHEET

☐ PRETEST
☑ POSTTEST

DATA SET DENTIFIER	CONFIGURATION	SCI	HD.	PAR/	METE	irs/v	ALUES	NO.			NUMBER	S (OR	ALTE	RNATE	INDF	PENDE	NT VAI	RIABL	E)	
			β	SeL	SeR	SeLO	SeRO	RUNS	SRF	Sr				0.60	0.90	1.20	1.46	1.96	299	196
76 305	(BICIDIFIMI)(WIE)(VIKIRI)	10	D	0	0	0	0	6	10	0				043/	044/0	045/0		089/0	023/0	024/
306		20						6							08//0				026/0	
307		30	D					3						192/0					027/0	028/
308	,	50	Ð	+	+		LY_	2											193/0	
309		A	0	10	10	10.	10	6						187/0	186/0	185/0		145/0	137/0	138/
310		B	0	¥	, T	_ i_	_\ \ _	4							189/0				136/0	135/0
3//		A	0	-20	-20	-20	-20	6							041/0			101/0	116/0	115/0
3/2		В	0			L _	_	4						033/0	034/ 0				117/0	
3/3		20	D	Y	¥	_ ↓ _	_ v	6						083/0	084/0	085/0		102/0	120/0	119/0
314		fì_	0	-40	-40	-40_	-40											100/0		
315		В	0			L (_	_ _	4						191/0	190/0				125/0	
316		C	0	Y	Y	<u> </u>	<u> </u>	2											196/0	<u>t</u>
3/7		A	0	0	0	-20	-20	6							³³⁸ /0	039/0			121/0	
318		ß	0	Ÿ	+	+	4	4	,				k	036/0	035/0				124/0	123/0
3/9		A	0	10	-10	10	-/0	4							183/0	184/0		144/0		
320		B	0	ų.	Ť			4_						181/0					1490	139/
321		A	0	0	0			4						78/0	176/0	177/0		143/6		
322		В	0			Y	+	4	Υ						175/0				141/0	142/0
323		A	0	!		0	0	6	40	i					17%	171/0			105/0	
324	Ÿ	\mathcal{B}	0	Ý	4	+	<u> </u>	4	y	Y			/	73/0	172/0				108/6	107/0
1	7 13	19		2 5	5		31		37	14	3	49	***************************************	5.5		61	-	67		7 5 7
		1.				احسد	<u> </u>	<u> </u>	L.	لسه	on the same of the same	ور بالمحددة			·		- Latination		al majoratora	
COEFFIC	IENTS:															ID	PVAR(1) IDI	PVAR (2	2) ND

MSFC - Form 263-2 (February 1972)

TABLE II. (CONCLUDED)

TEST MSFC TW7555 DATA SET COLLATION SHEET

PRETEST

DATA SET	CONFIGURATION	SC	HD.	PAR	AMETE	irs/v	LUES	NO.	1	MACH I	UMBERS	(OR ALT	ERNATI	INDE	PENDE	NT VA	RIABL	E)	
DENTIFIER		α	β	Se L	SeR	SeLO	SeRO	oi RUNS	SRF	Jr						1.46			4.9
276325 (E	CIDIFIMI) (WIEI) (VIKI)	RI) 10	D	0	0	0	0	4	40	0	The state of the s		179/0		168/0			113/0	
326		20						3					167/0	1	†	<u> </u>		112/0	
327		30	D					3	1	1			166/0					109/0	
328	•	A	0					6	10	15			157/0	158/0	159/0		146/0	129/0	
329		\mathcal{B}	0					4		1				155/0			***************************************	128/0	127
330		0	D					4					163/0	164/0	165/0		147/0		
331		10	D					4	Y				.1	1	160/0		148/0		
332		A	0					6	40						150/0		149/0	132/0	131/
333		B	0		<u> </u>	<u> Y</u>	+	4	¥	<u> </u>			153/0	154/0				133/0	134
334	<u> </u>	E	0	0	0	0	0	2	10	0			087/0	086/0					
																;			
`																			
						l													
1	7 13	19		2 :	5	3	1	3	37	4:	}	49	55		61		67		75
	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				مف السال	بالسيدي	-				·							A	\perp
COEFFICIE	NTS:														ID	PVAR(1) IDF	VAR(2	2) N

MSFC - Form 263-2 (February 1972)

TABLE III DIMENSIONAL DATA

MODEL COMPONENT: BODY - BI			
GENERAL DESCRIPTION: BASIC DEL	TA WING FUSELAG	E PER NAR LINES (DRAWI NG
MODEL SCALE = .004			
DRAWING NUMBER: VL000001			
	THEOR	ETICAL	ACTUAL MEASURED
DIMENSIONS:	FULL-SCALE	MODEL SCALE	MODEL SCALE
Length	1328.33	_5.313	at 1881 de la companya de la company
Max. Width - IN.	237.96	0.952	
Max. Depth - IN.	238.00	0.952	
Fineness Ratio - IN.	5.527	5.527	
Area-FT ²			
Max. Cross-Sectional	326.0	00522	
Planform		-	
Wetted			
Base			

MODEL COMPONENT: BODY - CANOPY	CI		
GENERAL DESCRIPTION: CANOPY US	ED WITH BASIC DE	LTA WING FUSELAC	GE PER
NAR LINES DWG VL70-000001			
MODEL CALE = 0.004			
DRAWING NUMBER: VL70-000001	MITTODE	T.C.A.Y	
DIMENSIONS:	THEORET		ACTUAL MEASURED
24121020101	FULL-SCALE	MODEL SCALE	MODEL SCALE
STA FWD BULKHEAD, IN	340.00	1.3600	
STA, TRAILING EDGE, IN	560.00	2.240	
Max. Depth		***	494844
Fineness Ratio			
Area			· · · · · · · · · · · · · · · · · · ·
Max. Cross-Sectional			
Planform			
Wetted			
Base			
Winshield consists of six (6) Pan Pilots Eye is at the following po	els. ints.		
FUS STA -IN	408.00		
B. P IN W. P IN	24.00 455.00		
View Angle Available:			
DEG Upward	20.00		
DEG Downward	24.00		·

MODEL COMPONENT: BODY - MANIPU	LATOR HOUSING -	DI	
GENERAL DESCRIPTION:	·		
SCALE MODEL = 0.004			
DRAWING NUMBER: VL70-000001			
	THEORE	TICAL	ACTUAL MEASURED
DIMENSIONS:	FULL-SCALE	MODEL SCALE	MODEL SCALE
Length, IN	967.0	3_8680	(MARA)
Max. Width, IN	-53.32	0.2132	
Max. Depth, IN	20.00	0.080	
Fineness Ratio			
Area			
Max. Cross-Sectional			
Planform		-	
Wetted		Control of the Contro	
Base			

MODEL COMPONENT: BODY - ORBIT	AL MANEUVERING ST	YSTEM POD-ML	
GENERAL DESCRIPTION:			
MODEL SCALE = 0.004			The first of the state of the s
DRAWING NUMBER: VL - 000001	•		
DIMENGIANG	THEORI	ETICAL	ACTUAL MEASURED
<u>DIMENSIONS</u> :	FULL-SCALE	MODEL SCALE	MODEL SCALE
Length ∼IN	290.67	_1.1626	
Max. Width ∼IN	67.33	0.2693	-
Max. Depth ∼ ^{IN}	104.00	0.416	·
Fineness Ratio		-	
Area			
Max. Cross-Sectional		-	
Planform		646	*
Wetted	349	-	
Base	·	_	

GENERAL DESCRIPTION:DELTA_WING_WITH	-5° TWIST AND RO	UNDED WING TI	PS. WING
BLENDS INTO BODY, FOLLOWS NAR LINES.	V70-000001 FOUL	. SPAN IS 78	604 % OF
THEORETICAL DELTA WING. MODEL SCALE	= 0.004		
	**************************************		· · · · · · · · · · · · · · · · · · ·
DOMETHO NUMBER			
DRAWING NUMBER: VL70-000001			
DIMENSIONS:	THEORETICAL	<u> </u>	CTUAL MEAS
TOTAL DATA	FULL-SCALE	MODEL SCALE	MODEL SO
Area			
Planform	3221.92	05155	
Wetted			
Span (equivalent)	1007.8	4.0312	
Aspect Ratio	2.144	2.144	
Rate of Taper Taper Ratio	1.191	1.191	
Diehedral Angle, degrees	0.219 3.500	0.219 3.500	
Incidence Angle, degrees	3.000	3.000	
Aerodynamic Twist, degrees	-5.000	-5.000	
Toe-In Angle	3.000	3.000	
Cant Angle	-2,000	-2.000	
Sweep Back Angles, degrees	10.010	1	
Leading Edge Trailing Edge	<u>49.910</u> -0.183	<u> 49.910</u>	
0.25 Element Line	41.675	<u>-0.183</u> 41.675	
Chords:	*****		
Root (Wing Sta. 0.0)	760.56	3.0422	
Tip, (equivalent)	159.72	0.6388	
MAC Eug Sta of 25 MAC	<u>525.4</u> 1132.98	2.0976	
Fus. Sta. of .25 MAC W.P. of .25 MAC	304.55	<u>4.5319</u> <u>1.2182</u>	******
B.L. of .25 MAC	196.09		
Airfoil Section	196.09	7843	
Root	·		
Tip			
EXPOSED DATA			
Area	2203.00	0.03524	************
Span, (equivalent)	795.86	3.1834	
Aspect Ratio	1.966	1.966	***************************************
Taper Ratio Chords	0.260	0.260	
Root	641.57	2.5662	
Tip	166.68	.6667	
MAC	450.63	1.8025	
Fus. Sta. of .25 MAC	1190.82	4.7633	
W.P. of .25 MAC	305,47	1.2219	
Balle of .25 MAC	260.80	1.0432	
Leading Edge Cuff			

MODEL COMPONENT: <u>ELEVON - EL (DA</u> GENERAL DESCRIPTION: <u>FULL SPAN. C</u>		ELEVON LOCATED	ON
WING WI.			
MODEL SCALE = 0.004			
DRAWING NUMBER: VL70.000001			
	THEORE	<u> </u>	ACTUAL MEASURED
DIMENSIONS:	FULL-SCALE	MODEL SCALE	MODEL SCALE
Area (TRUE), FT ²	347.2	.00555	
Span (equivalent)	384.0	1.536	<u> </u>
Inb'd equivalent chord	134.38	537	
Outb'd equivalent chord	134.38_	537	
Ratio movable surface chord/ total surface chord			
At Inb'd equiv. chord	0.209	0.209	
At Outb'd equiv. chord	0.805	0.805	
Sweep Back Angles, degrees			
Leading Edge	-0.183	-0.183	
Tailing Edge	-0.183	-0.183	
Hingeline	-0.183	-0.183	
Area Moment	4164.40	0.00026	
(Normal to hinge line) (PRODUCT OF AREA & MEAN)			

MODEL COMPONENT: VERTICAL TAIL - VI			
GENERAL DESCRIPTION: <u>CENTERLINE VERT</u>	ICAL ON DELTA WIN	NG CONFIGURAT	FION WITH
DOUBLE WEDGE AIRFOIL AND ROUNDED LE			
AREA LISTED BELOW. SCALE MODEL = 0		<u>, , , , , , , , , , , , , , , , , , , </u>	oues voin
TRICK EVOILE BELOW, SCALE HODEL - 0	.004		
DRAWING NUMBER: VL70-00000	the state of the s		
DIMENSIONS:	THEORETICAL		ACTUAL MEASURED
TOTAL DATA	FULL-SCALE	MODEL SCALE	MODEL SCALE
Area	415.25	00664	
Planform	1.29	00002	
Wetted	19.93	00032	
Span (equivalent) Aspect Ratio	323.9	1.2956	
Rate of Taper	0.504	1,675	
Taper Ratio	0.424	0.504	
Diehedral Angle, degrees		0.424	
Incidence Angle, degrees			
Aerodynamic Twist, degrees	-	•	
Toe-In Angle	0.0	0.0	
Cant Angle	0.0	0.0	
Sweep Back Angles, degrees			
Leading Edge	45.000	45.000	
Trailing Edge 0.25 Element Line	26.361	26.361	
Chords:	41.150	41.150	
Root (Wing Sta. 0.0)	275 50	1 1001	
Tip, (equivalent)	<u>275.52</u> <u>111.4</u>	<u>1.1021</u> 0.448	***************************************
MAC	205.0	0.820	
Fus. Sta. of .25 MAC	1462.2	5.849	
W.P. of .25 MAC	639.0	2.556	
B.L. of .25 MAC	ົ້າ	0,0	
Airfoil Section 5° HALF ANGLE			
Root DOUBLE WEDGE WITH			
Tip ROUNDED L.E. = EXPOSED DATA			
LAT USED DATA			
Area			
Span, (equivalent)			
Aspect Ratio	-10		· · · · · · · · · · · · · · · · · · ·
Taper Ratio			
Chords			- /
Root			
Tip			
MAC			
Fus. Sta. of .25 MAC			
W.P. of .25 MAC B.L. of .25 MAC	·		

*Void area located at the lower, .	art portion of th	e surface	

MODEL COMPONENT: RUDDER - RI			
GENERAL DESCRIPTION: RUDDER ON	CENTERLINE VEF	RTICAL TAIL, VI	
		***	relikin lilikilin garan jalan jalan ja sansan jalan in sain-
MODEL SCALE = 0.004			
DRAWING NUMBER: VL70-000001			
	THEORE	TICAL	ACTUAL MEASURED
DIMENSIONS:	FULL-SCALE	MODEL SCALE	MODEL SCALE
Area _FT ²	117.7	00188	
Span (equivalent) ∼in	226.0	0.9040	
Inb'd equivalent chord∼in	97.09	. 3884	
Outb'd equivalent chord∼in	52.02	.2081	
Ratio movable surface chord/ total surface chord			
At Inb'd equiv. chord	0.400	0.400	
At Outb'd equiv. chord	0.400	0.400	
Sweep Back Angles, degrees			
Leading Edge	34.889	34.889	
Tailing Edge	_ 26.361	26.361	
Hingeline	34,889	34.889	
Area Moment	647.77	.00004	
(Normal to hinge line) (PRODUCT OF AREA AND MEAN) CHORD			

TABLE IV.

INDEX OF MODEL FIGURES

FIGURE	DESCRIPTION	PAGE
1.	Axis System	27
2.	General Arrangement of Orbiter Model	28
3•	Location of Grit on Model	29
4.	Definition of Base and Cavity Areas for Axial Force Corrections	30
5•	Side View Photograph of Configuration $B_1C_1D_1M_1F_1W_1E_1V_1R_1$ With Elevons Deflected-20°	31

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	PAGES
Longitudinal Characteristics for Body Build-up	(A)	CONFIGURATION MACH	1-60
Effect of Full Elevator Deflection on Baseline Configuration	(A)	ELEVTR MACH	61-120
Effect of Outboard Only Elevator Deflections on Baseline Configuration	(A)	OBDELV MACH	121-180
Effect of Full Aileron Deflection with Baseline Configuration	(A)	ATLRON MACH	181-240
	(B)		241-258
Effect of Outboard Only Aileron Deflection with Baseline Configuration	(A)	OBDAIL MACH	259-318
	(B)		319-336
Effect of Rudder Flare with Baseline Configuration	(A)	RUDFLR MACH	337-396
	(B)		397-414
Effect of Rudder Deflection with Baseline Configuration	(A)	RUDDER	415-474
	(B)	RUDFLR MACH	475-492
Lateral-Directional Characteristics for Body Build-up	(c)	ALPHA MACH CONFIGURATION	493-546

5

TABLE V. (CONCLUDED)

TITLE	PLOTTED COEFFICIENTS SCHEDULE	CONDITIONS VARYING	PAGES
Lateral-Directional Stability Characteristics for for Body Build-up	(D)	CONFIGURATION MACH	547-558
Effect of Elevator Deflection with Baseline Configuration	(c)	ELEVIR MACH	559-576
Effect of Rudder Flare with Baseline Configuration	(c)	ALPHA RUDFLR MACH	577-594
Lateral-Directional Stability Characteristics for Rudder Flare	(D)	RUDFLR MACH	595 - 603
Effect of Rudder Deflection with Baseline Configuration	(c)	ALPHA RUDDER MACH	604-621
Lateral-Directional Stability Characteristics for Rudder Deflection	(D)	RUDDER MACH	622-633
Incremental Characteristics for Full Elevon Deflection	(E)	ALPHA MACH	634-649
Incremental Characteristics for Outboard Elevon Deflection	(E)	ALPHA MACH	650-665
Summary Characteristics of Baseline Configuration	(F)	ELEVTR	666-667

PLOTTED COEFFICIENTS SCHEDULE:

- (A) CLM, CN, CAF, CAB, CL, CD, L/D, XCP/L versus ALPHA CD versus CL CL versus CLM
- (B) CY, CYN, CBL versus ALPHA
- (C) CY, CYN, CBL versus BETA

- (D) D(CY), D(CYN), D(CBL) versus ALPHA
- (E) DCLM, DCL versus DE
- (F) L/D(MAX), CL L/D(MAX) versus MACH

Notes:

- 1. Positive directions of force coefficients moment coefficients, and angles are indicated by arrows.
- 2. For clarity, origins of wind and stability axes have been displaced from the center of gravity.

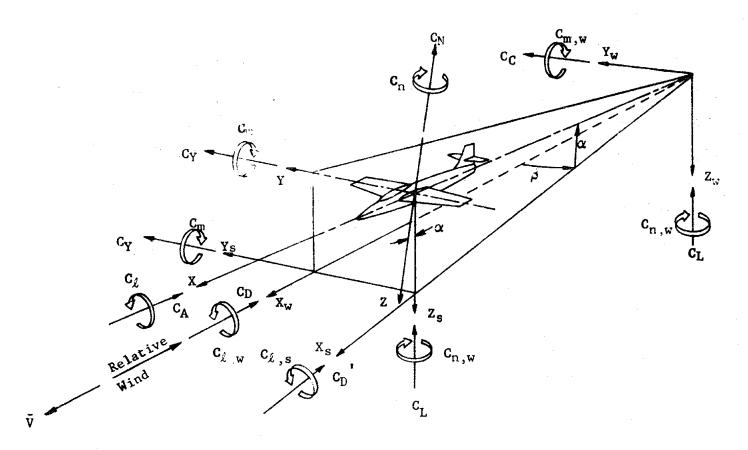


Figure 1. Axis systems, showing direction and sense of force and moment coefficients, angle of attack, and sideslip angle

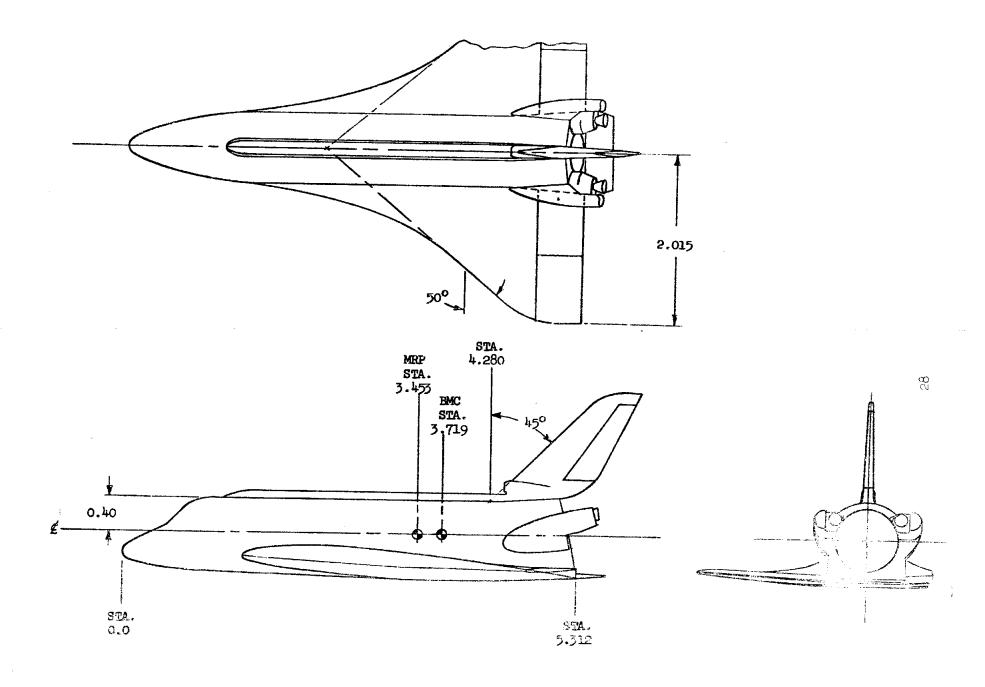
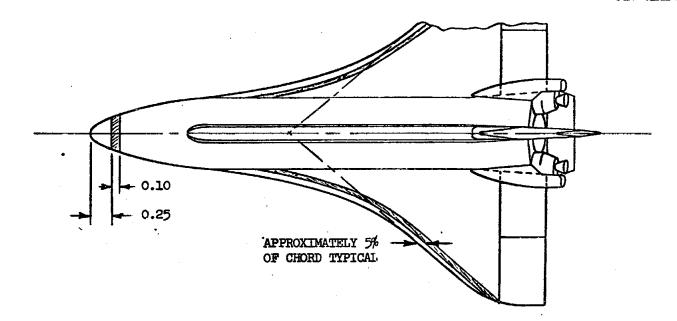


FIGURE 2 - GENERAL ARRANGEMENT OF ORBITER MODEL



NOTE: GRIT SIZE NUMBER 220

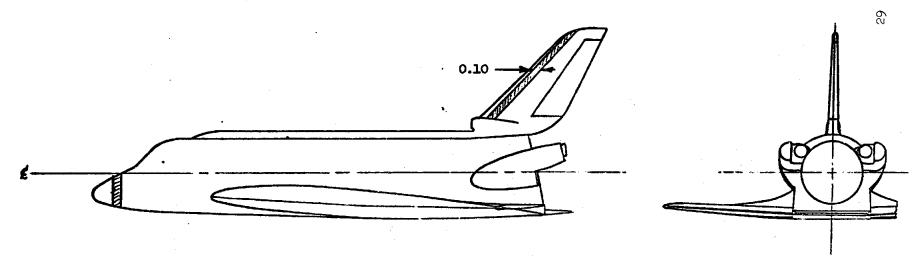


FIGURE 3 - LOCATION OF GRIT ON MODEL

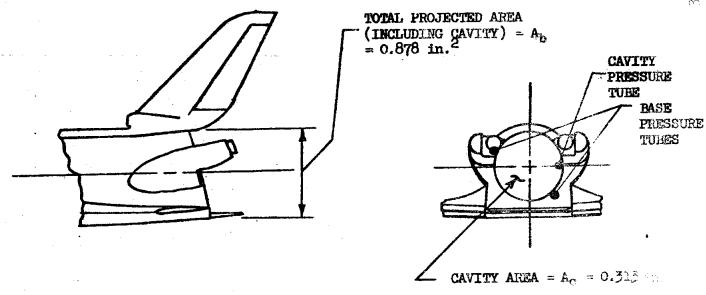
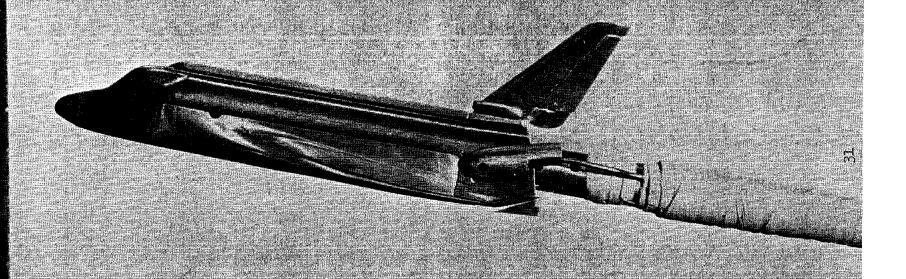


FIGURE 4 - DEFINITION OF BASE AND CAVITY AREAS FOR AXIAI, FORCE CORRECTIONS

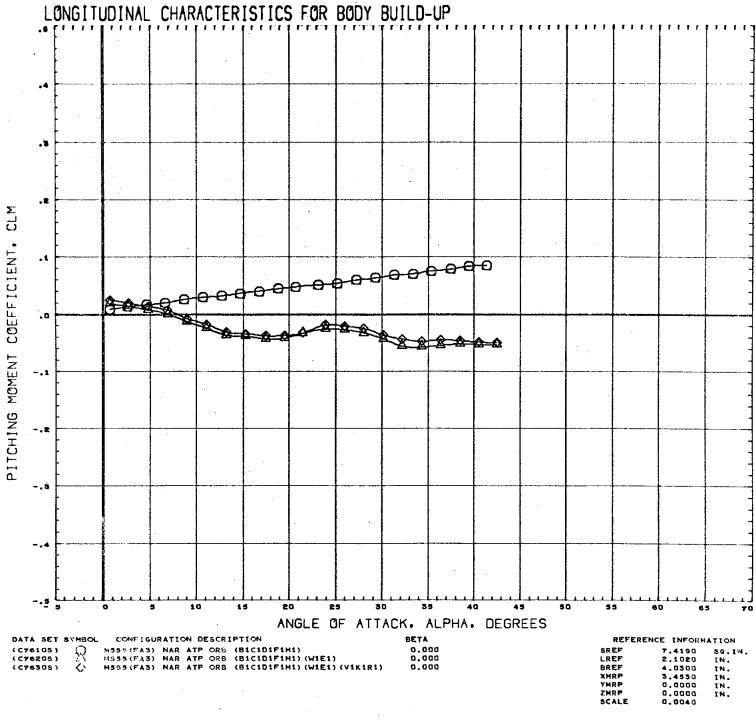
FIGURE 5 - SIDE VIEW PHOTOGRAPH OF CONFIGURATION B1C1D1M1F1W1E1V1R1 WITH ELEVONS DEFLECTED -200



MSFC TWT 4555
SEPT 29 1972 RUN 41
CONFIG
WESVRSO

NASA-MSFG S&E-Agio-AE

140-1-72

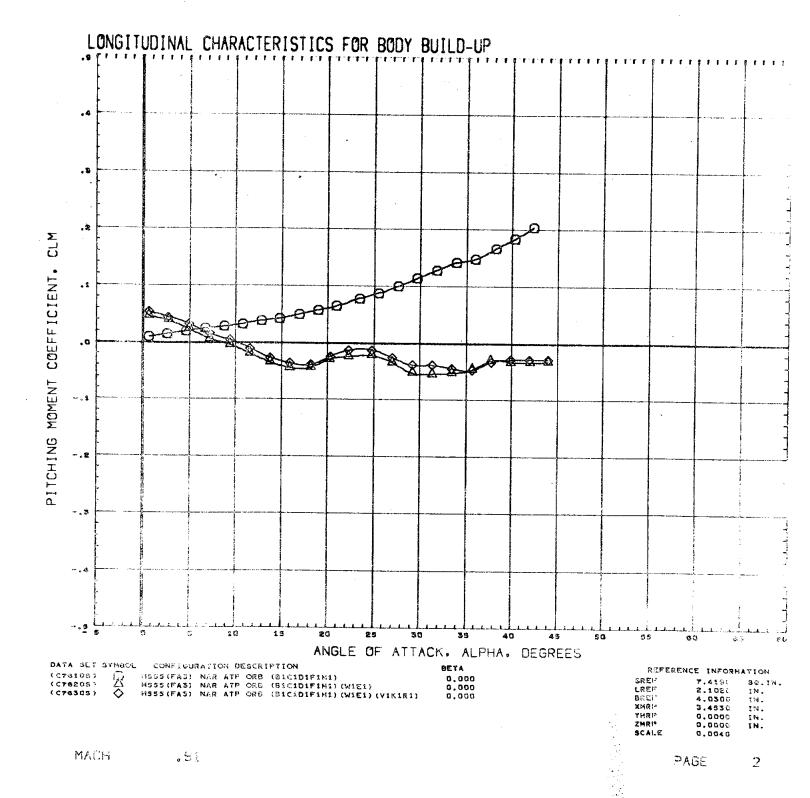


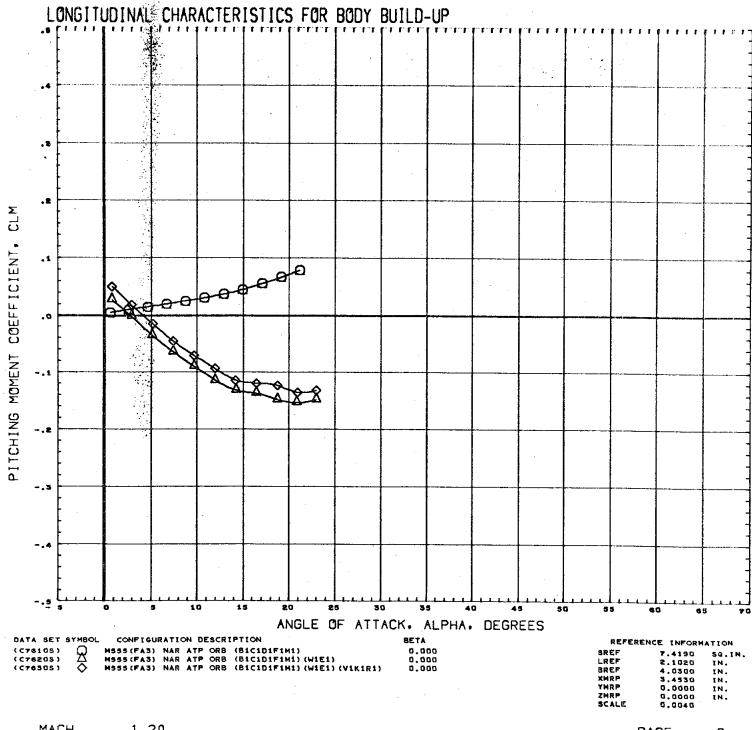
MACH

.60

PAGE

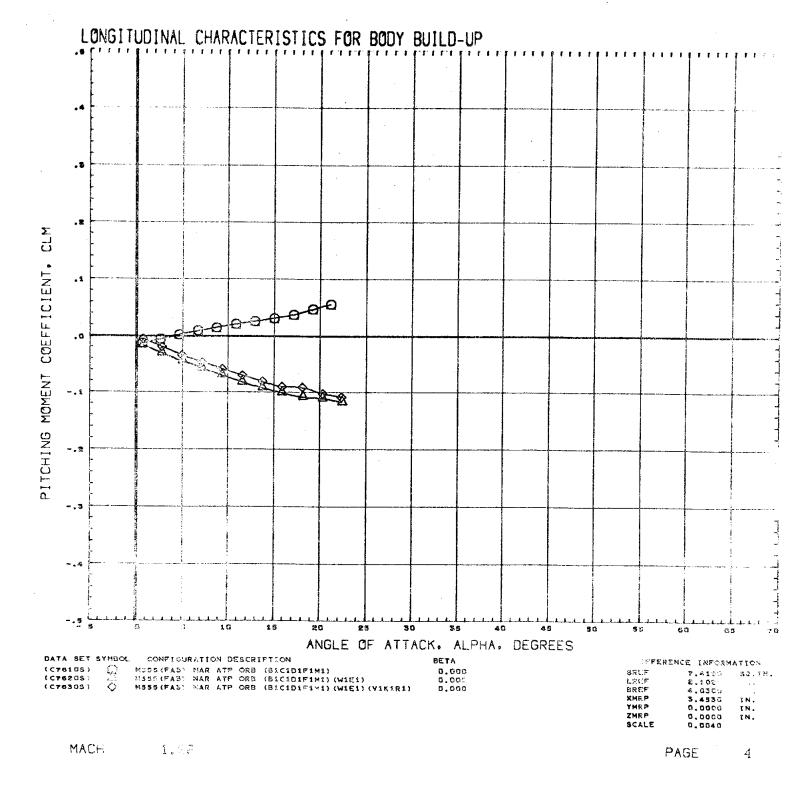
1



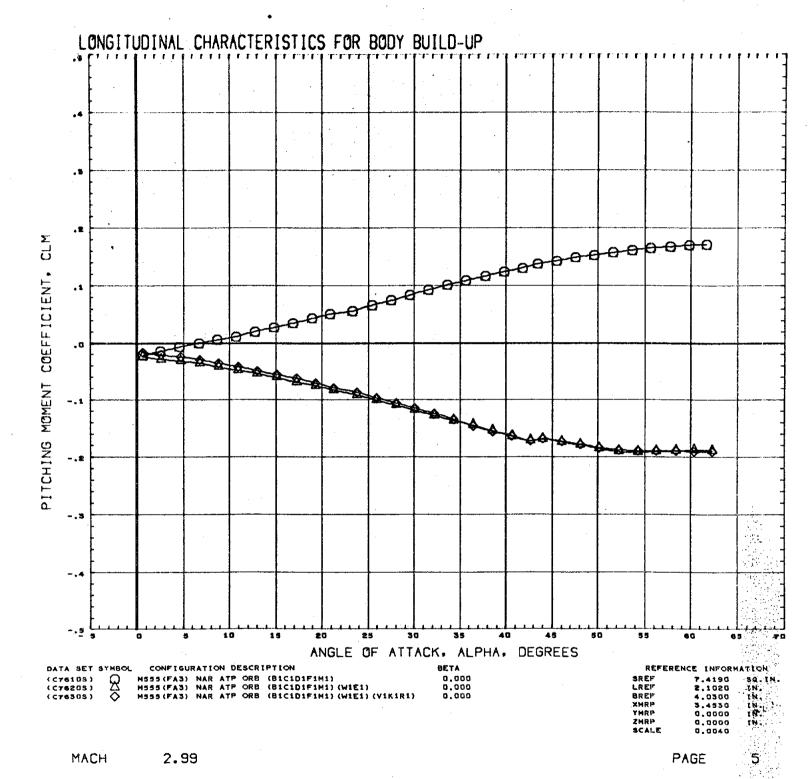


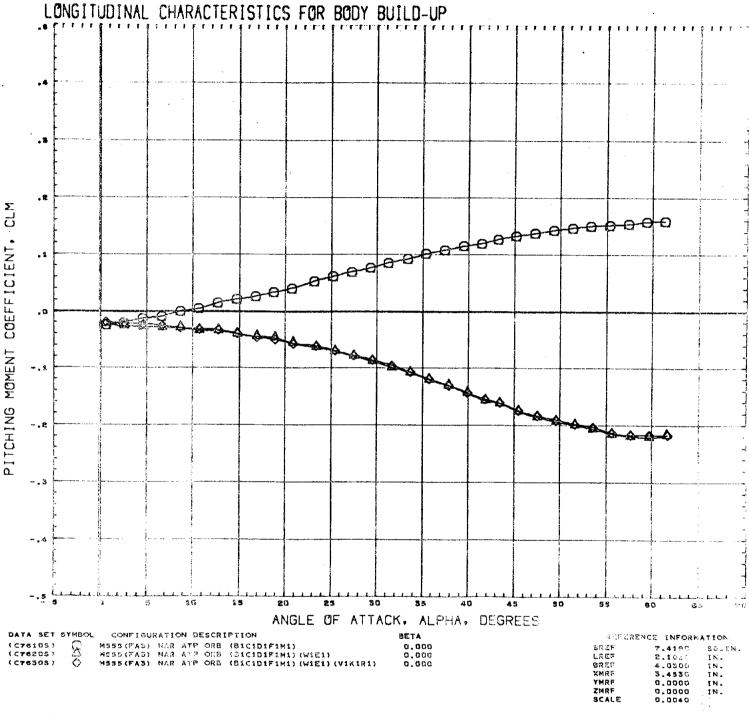
1.20

PAGE



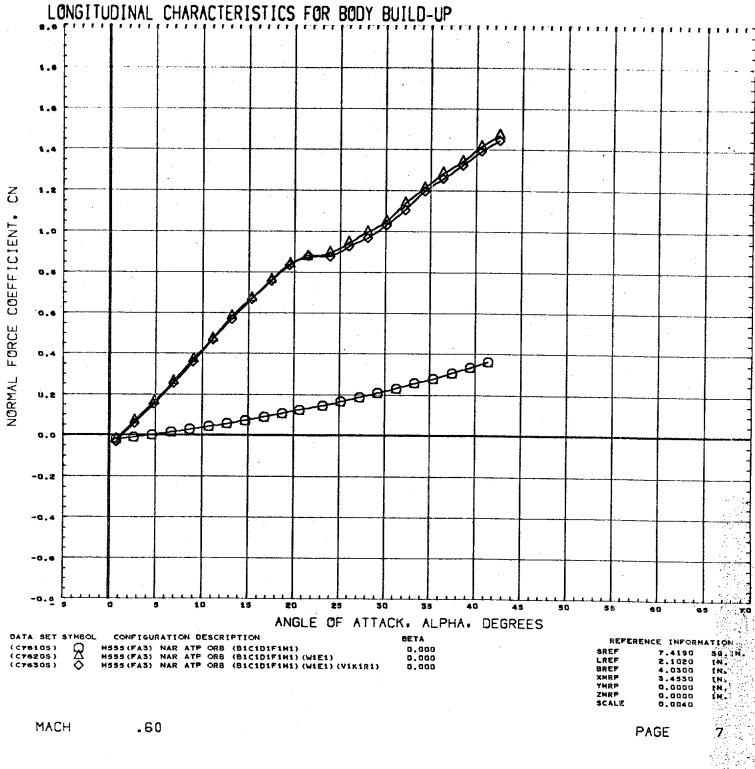
¥ A





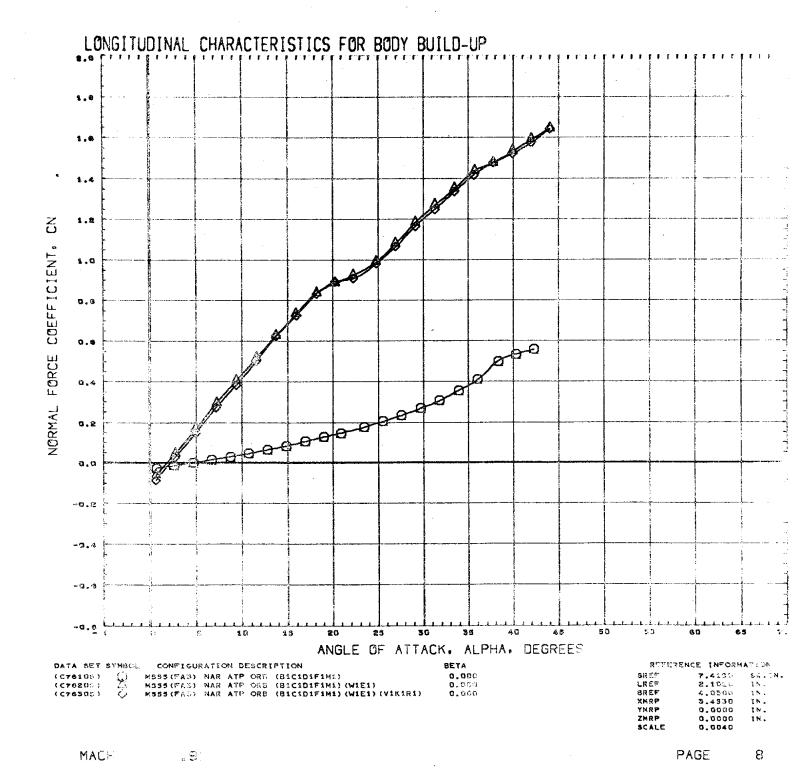
MACH 4.99

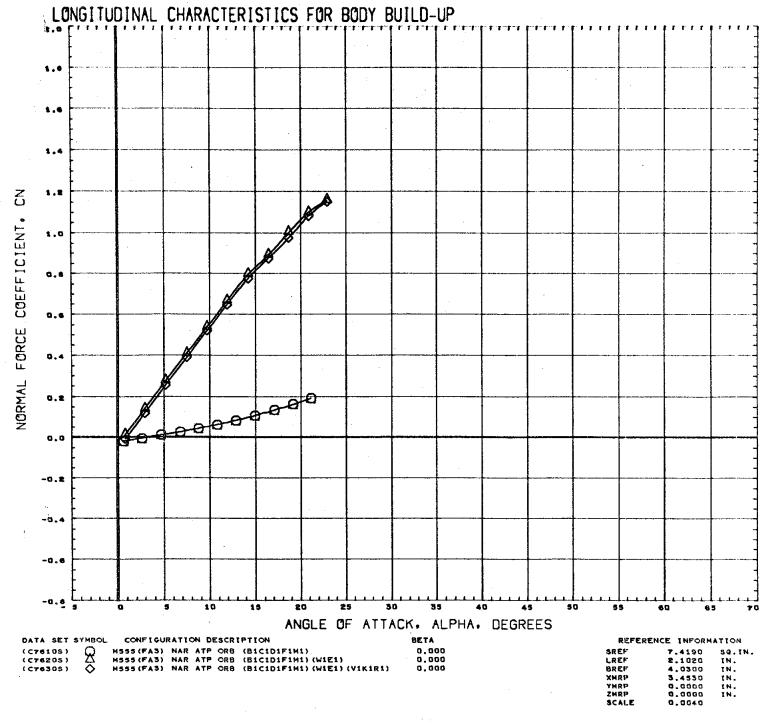
PAGE



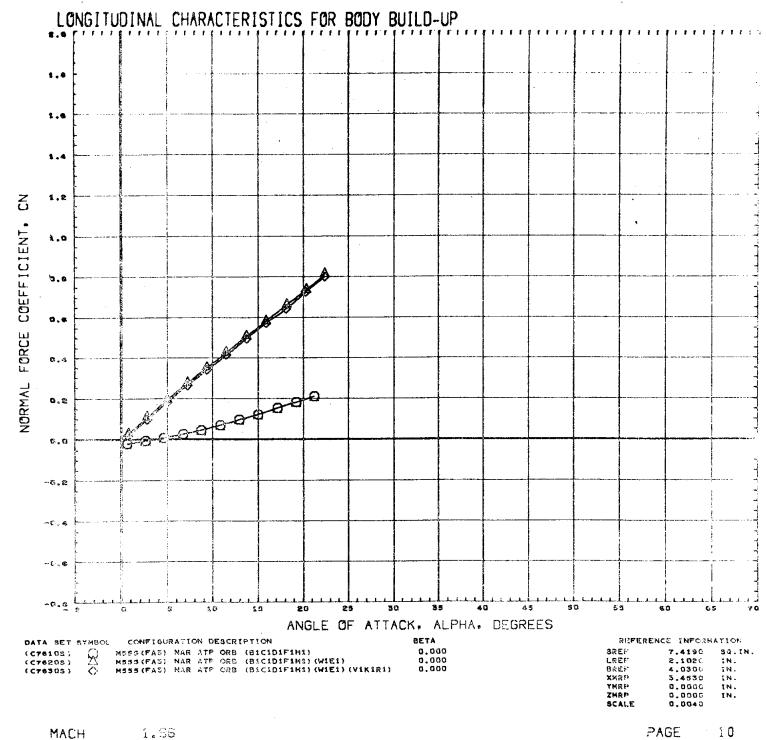
.60

PAGE

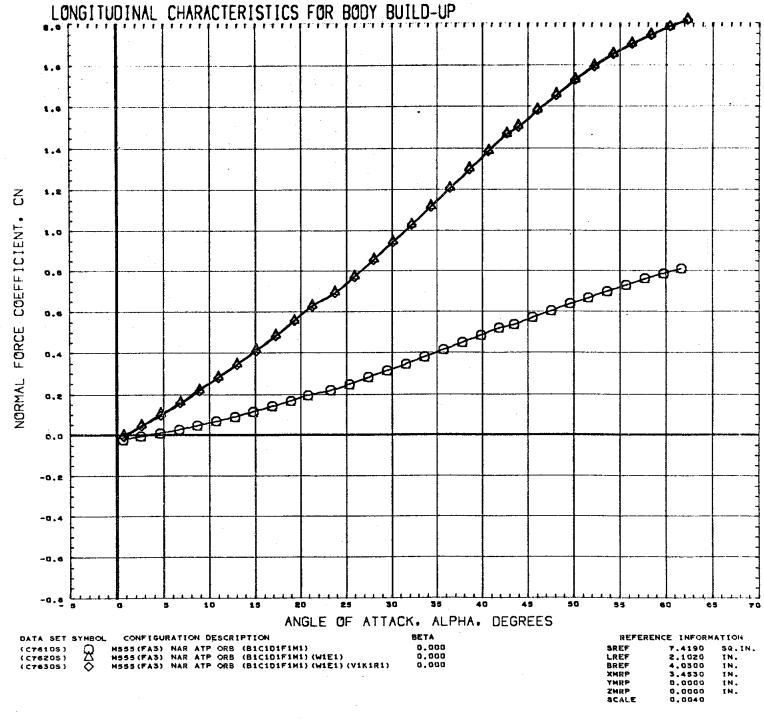




PAGE

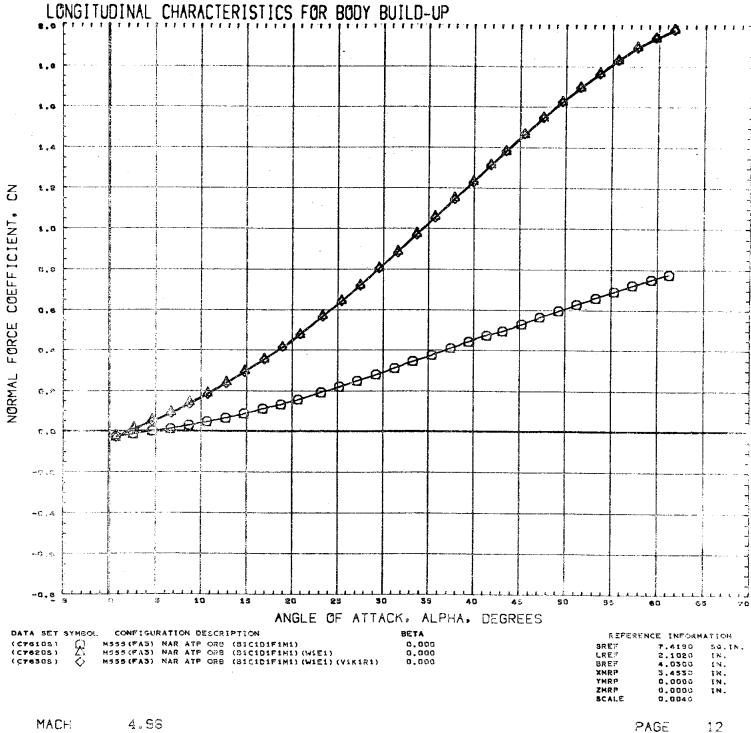


PAGE



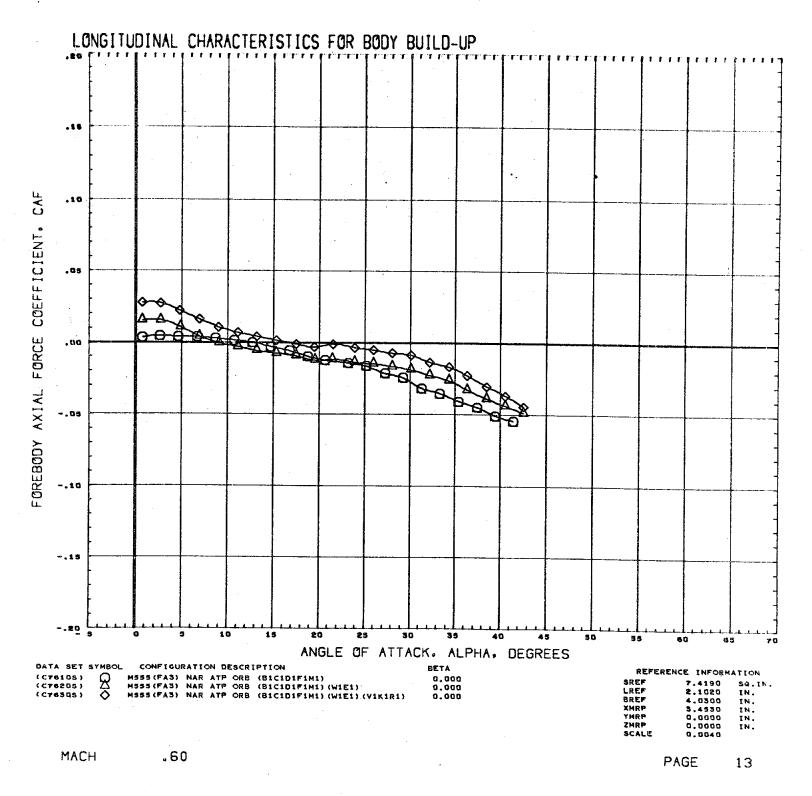
MACH 2.99

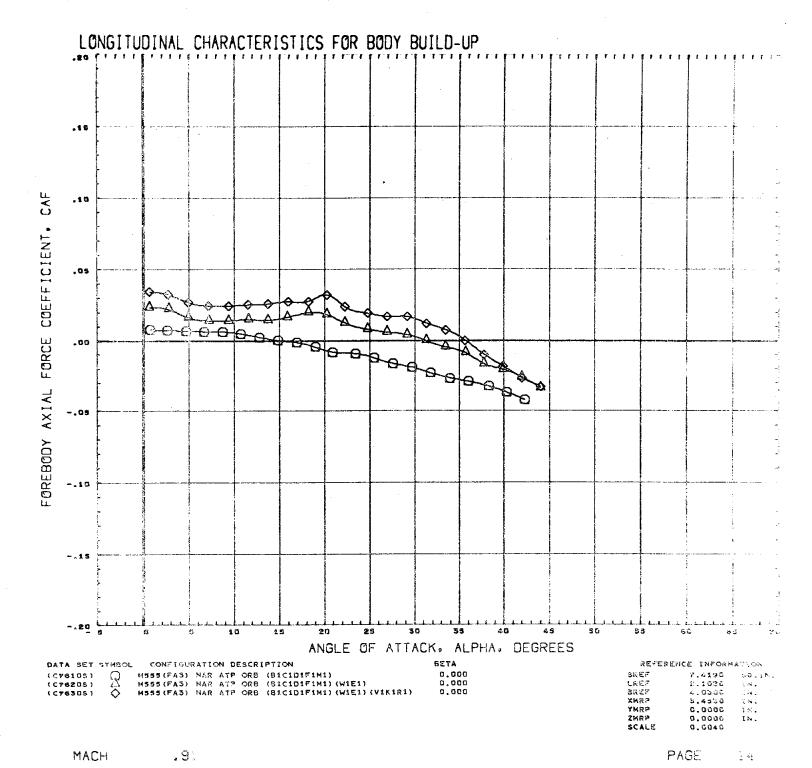
PAGE

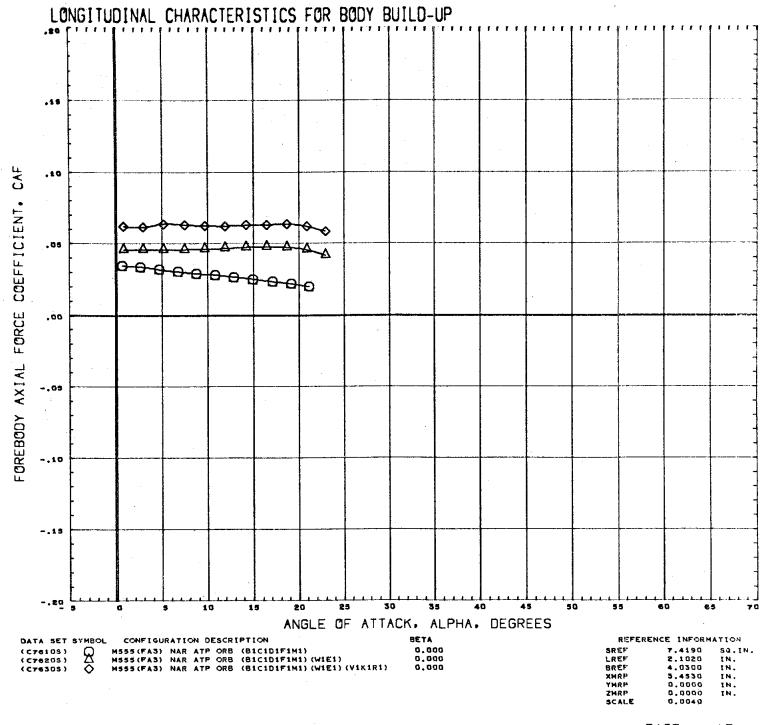


4,98

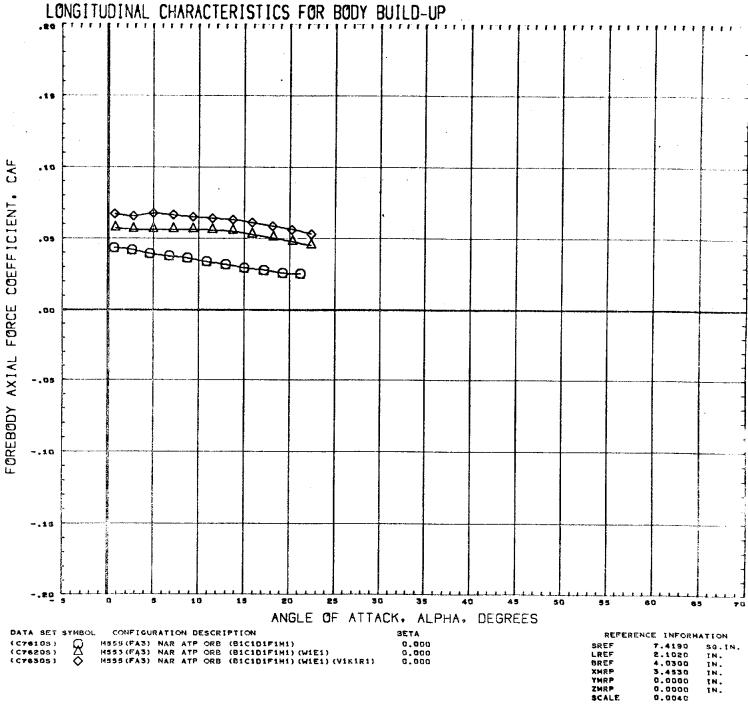
PAGE



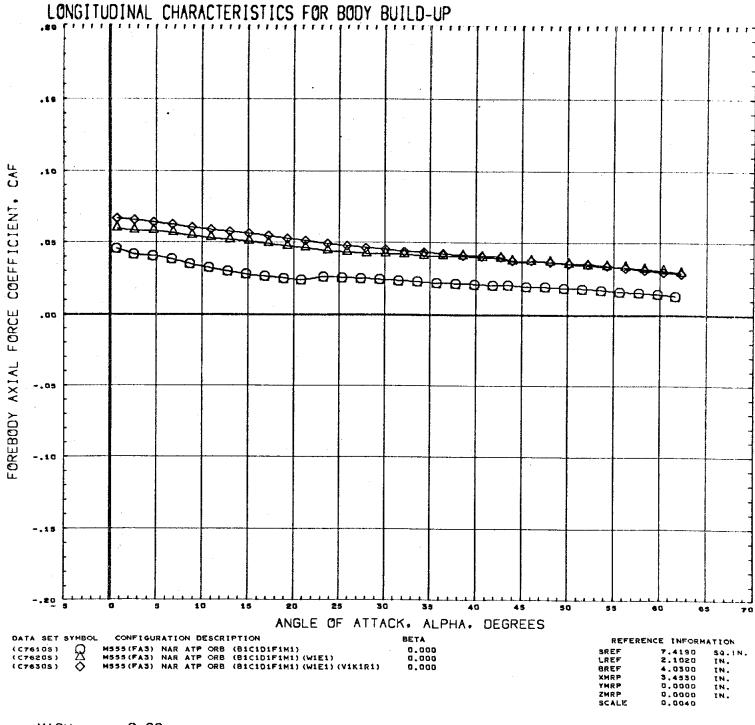




PAGE

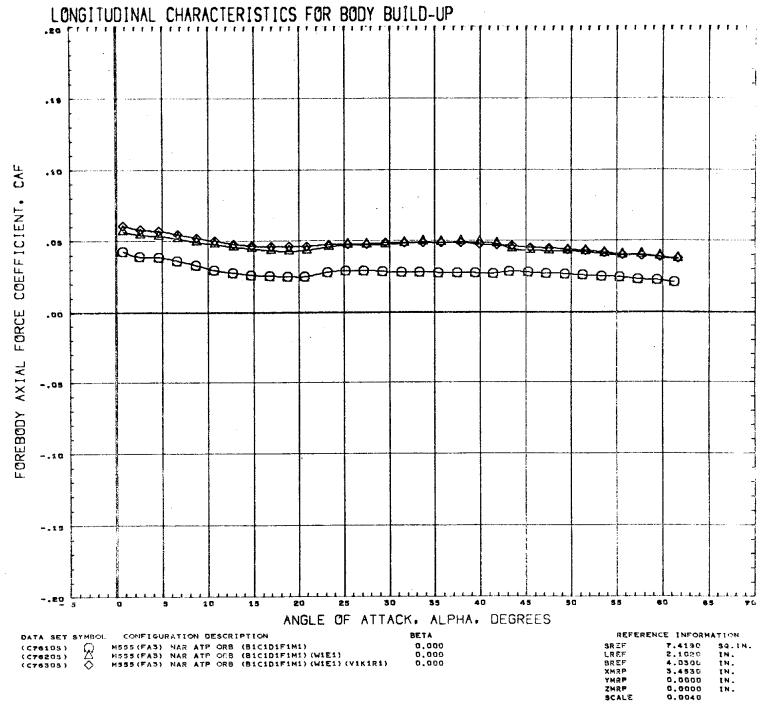


PAGE



MACH 2.99

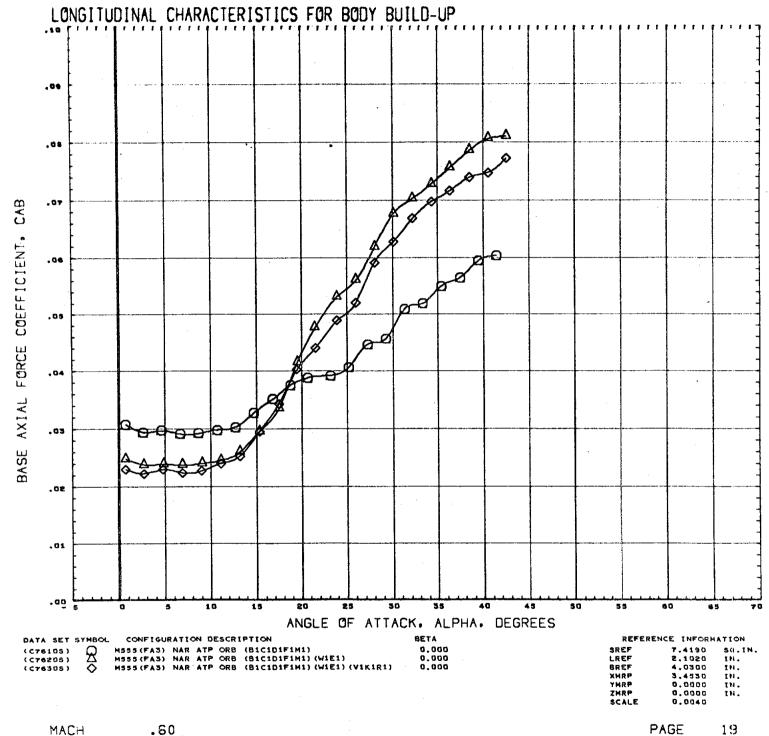
PAGE



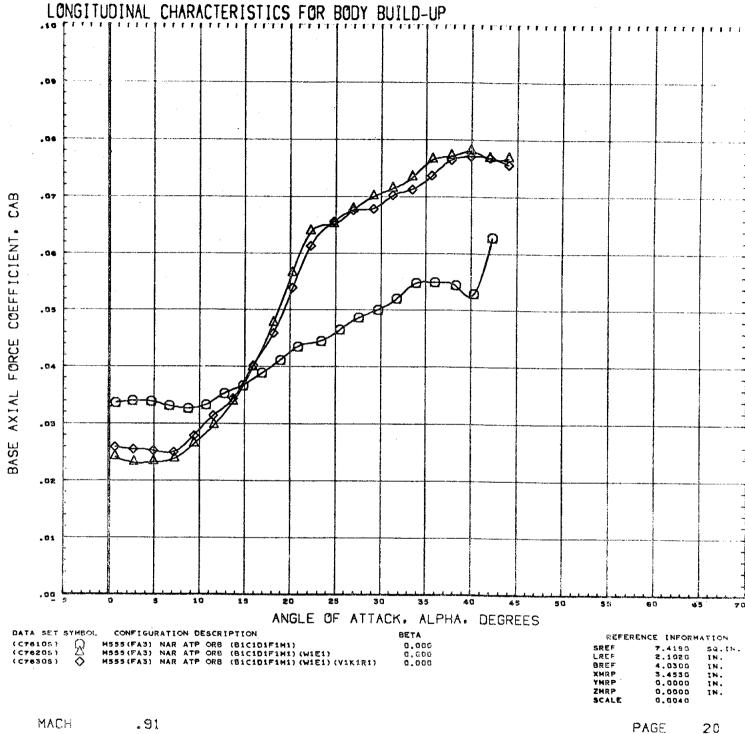
PAGE

18

MACH 4.96

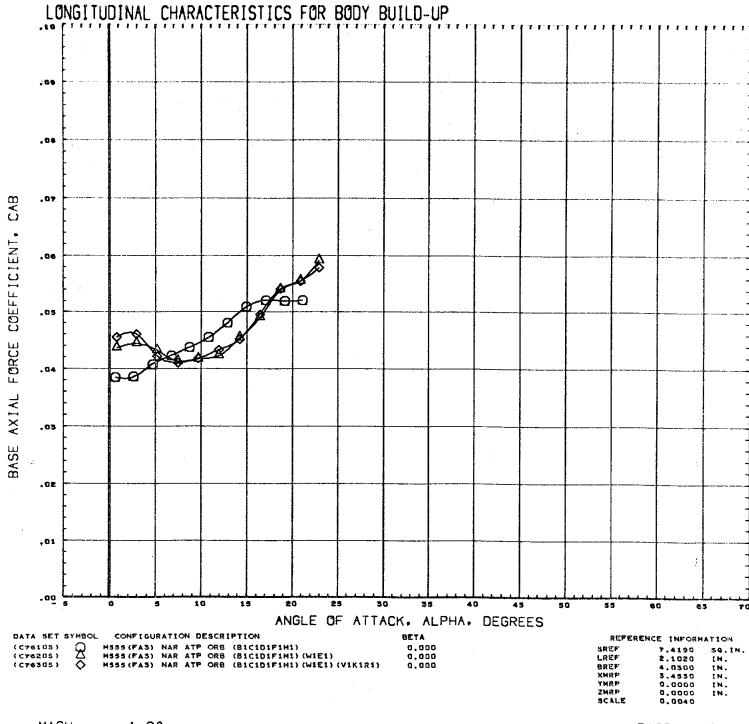


PAGE

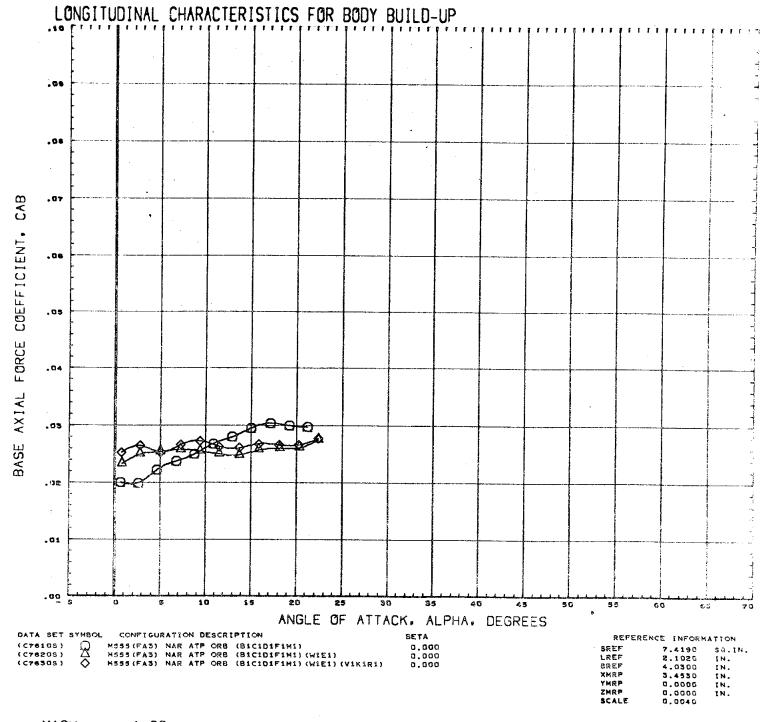


.91

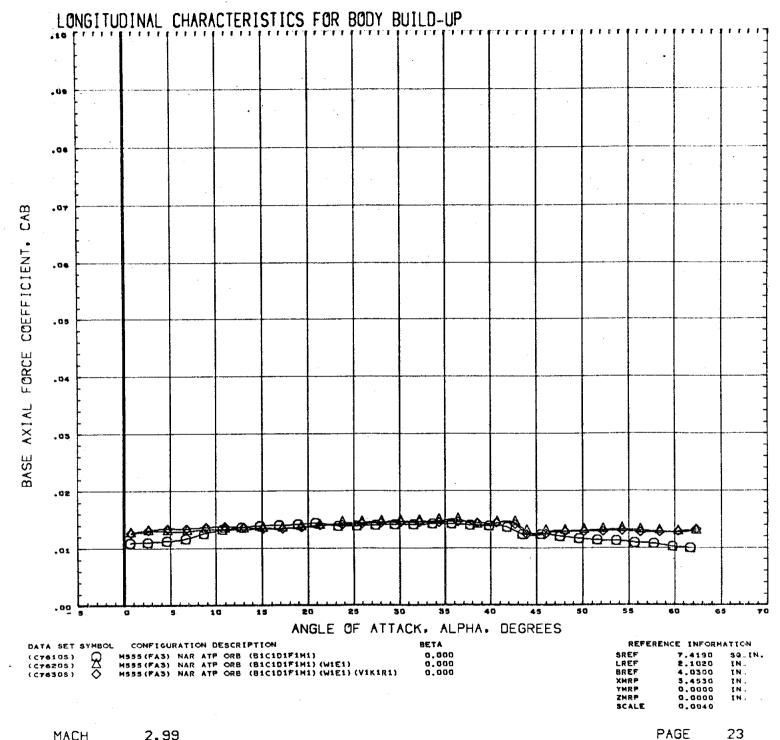
PAGE



PAGE

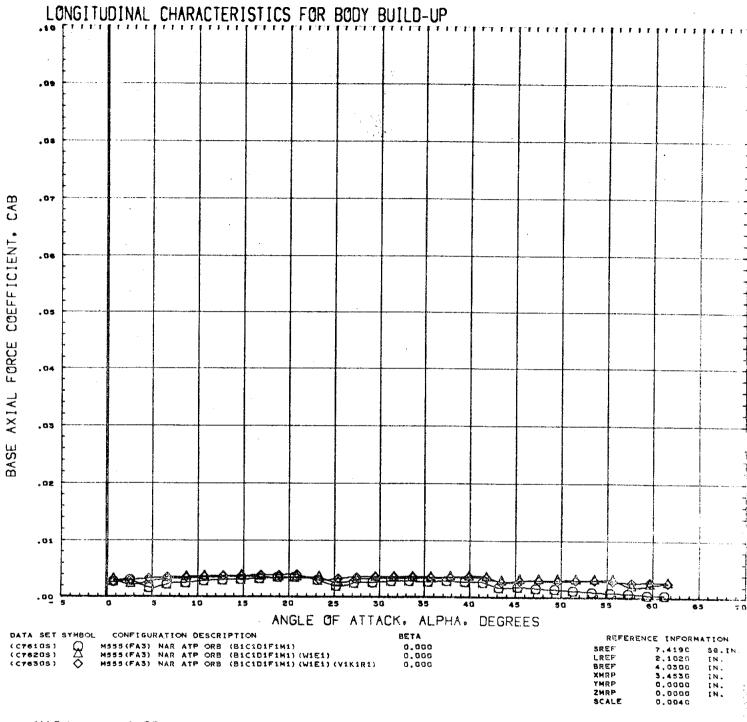


PAGE



23

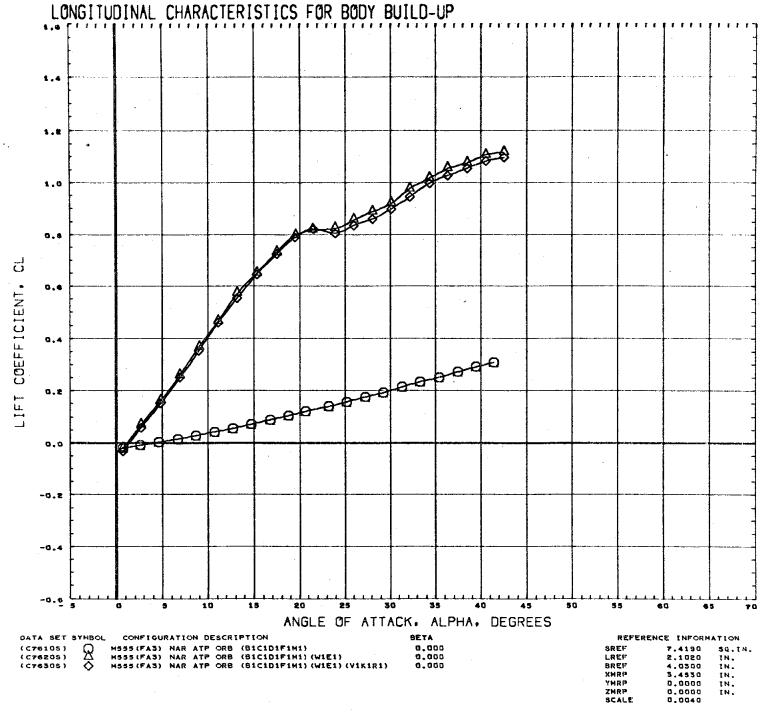
2.99 MACH



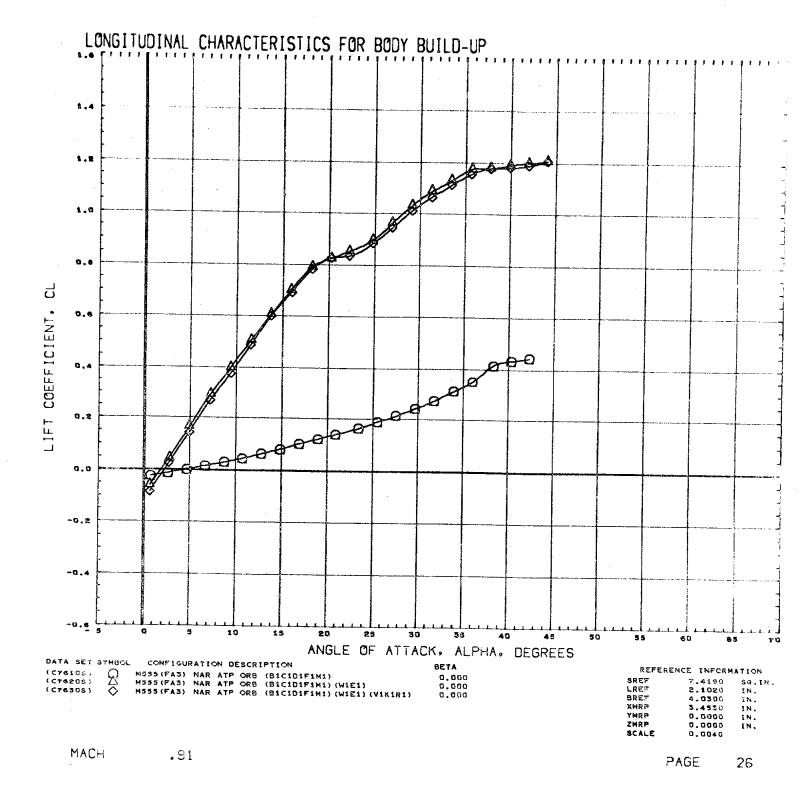
MACH 4.96

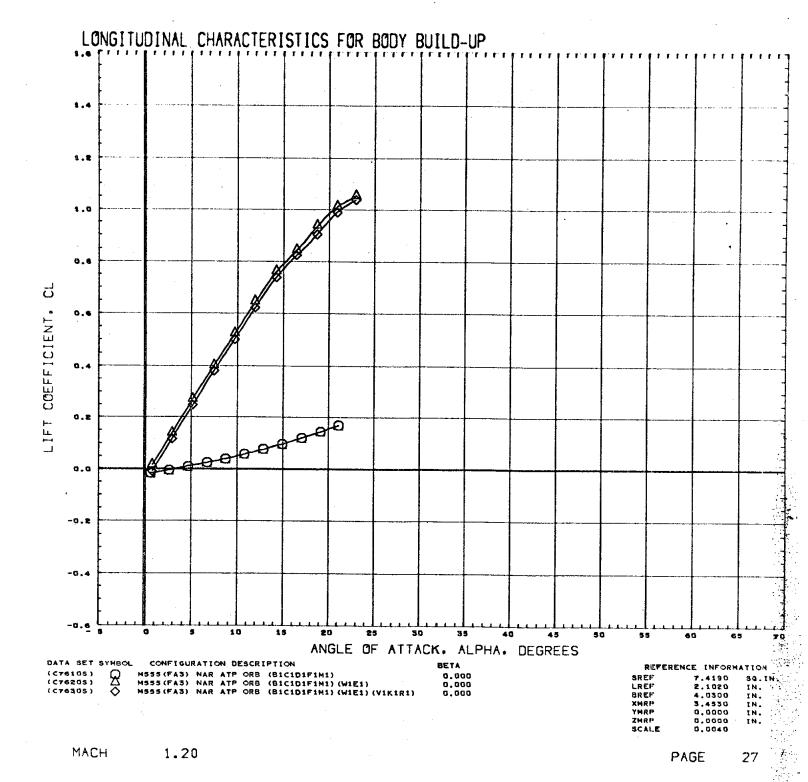
PAGE

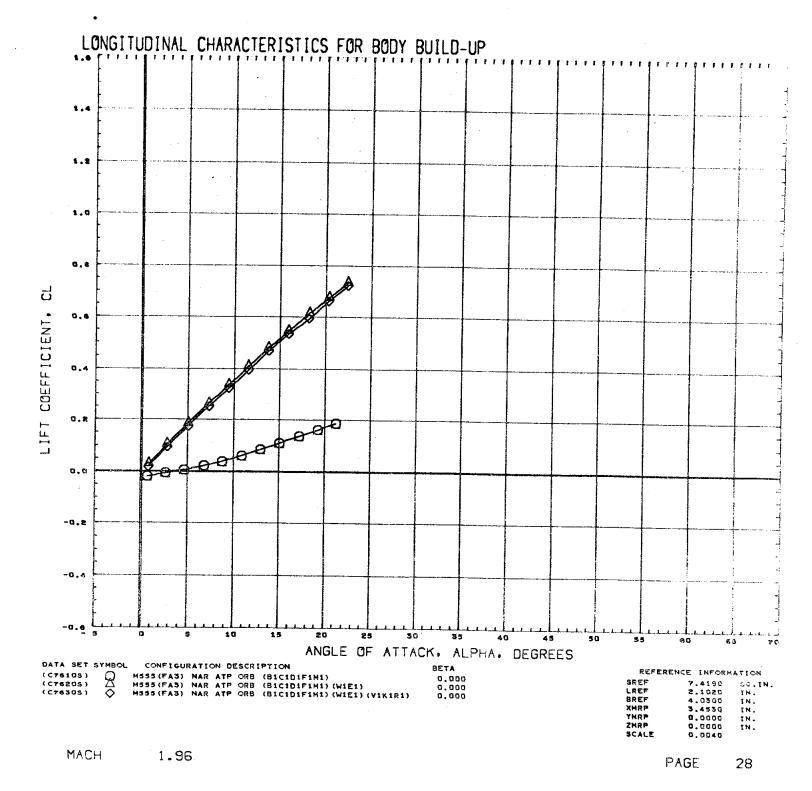
E 24

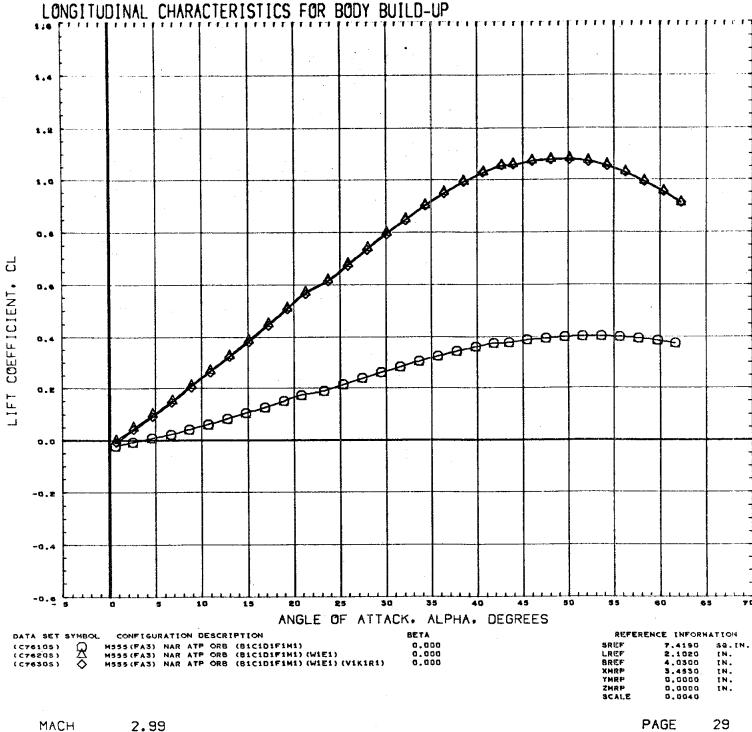


PAGE





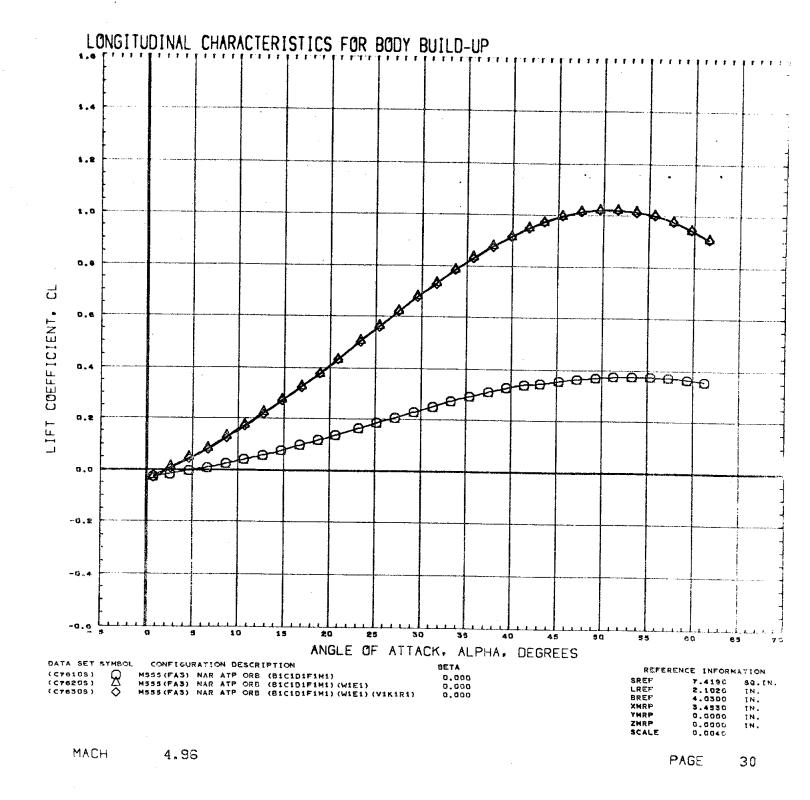


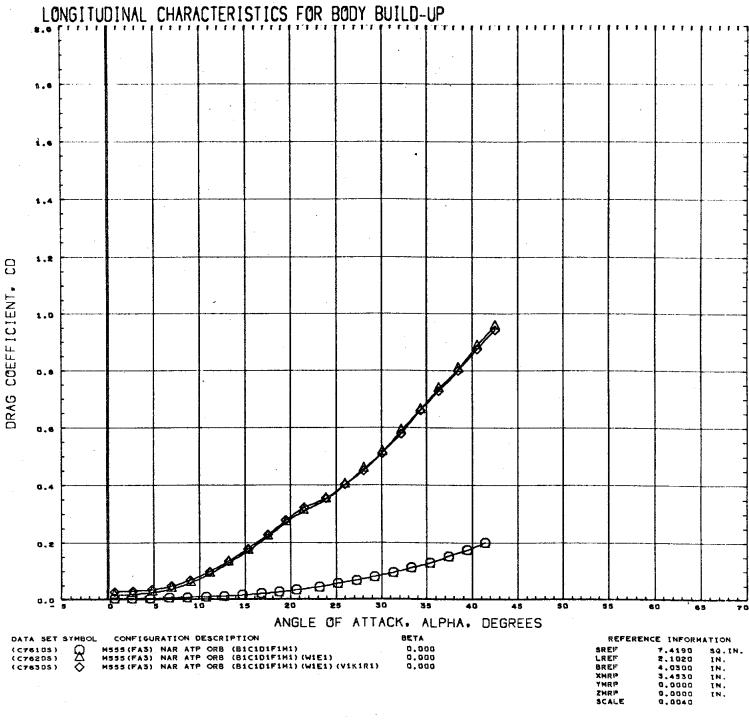


PAGE

29

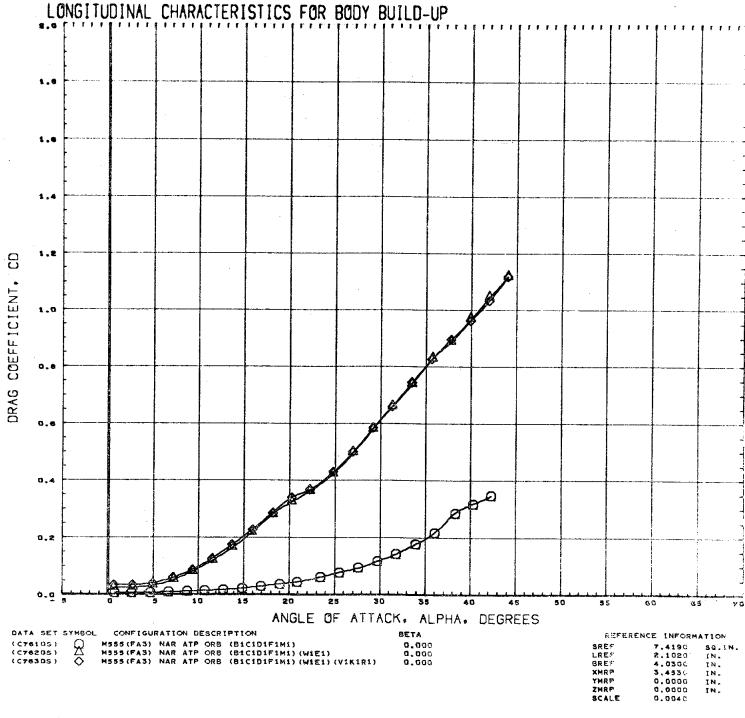
2.99



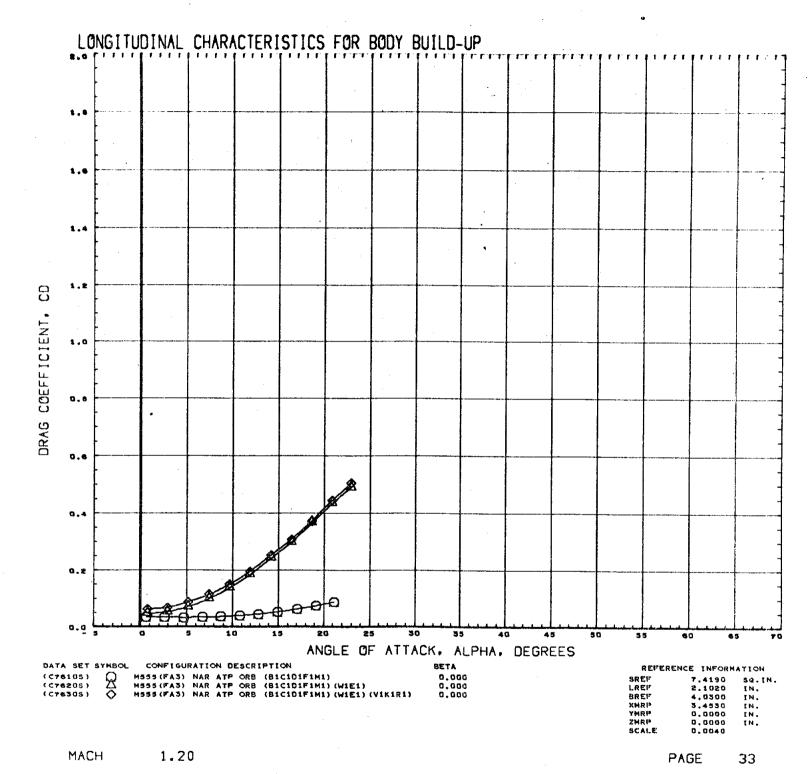


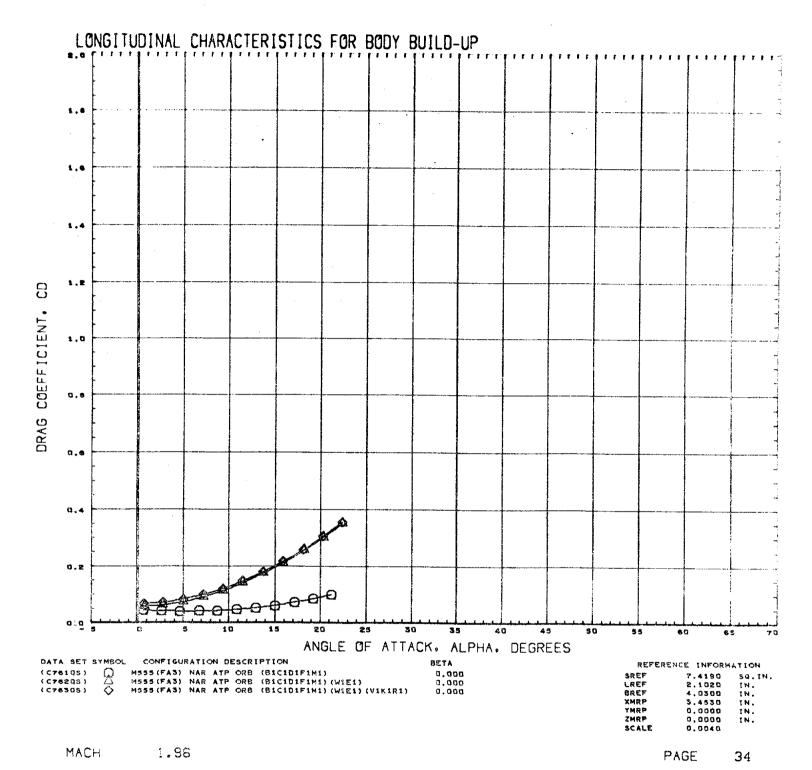
.60

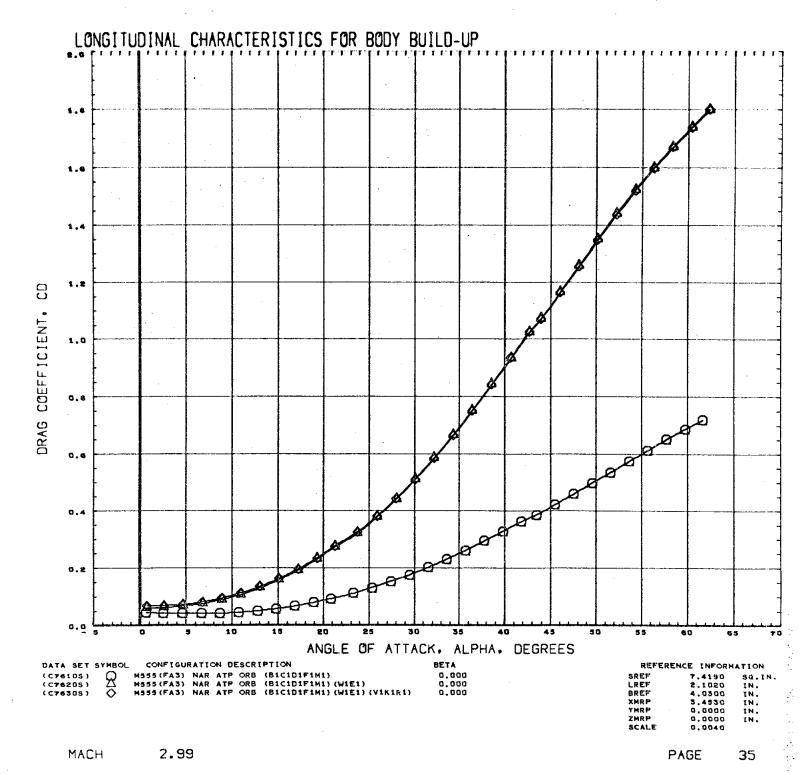
PAGE

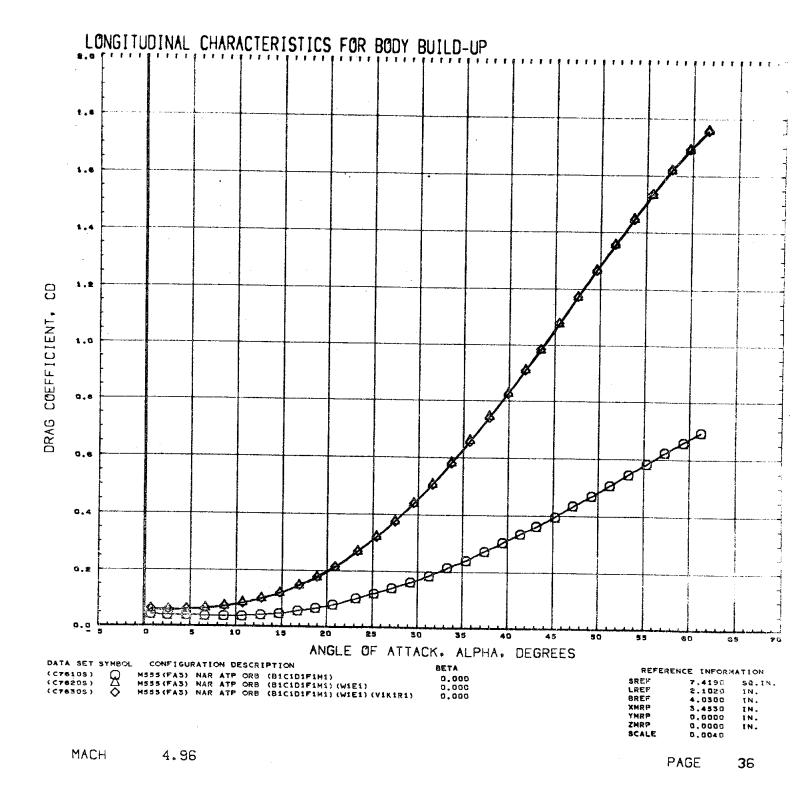


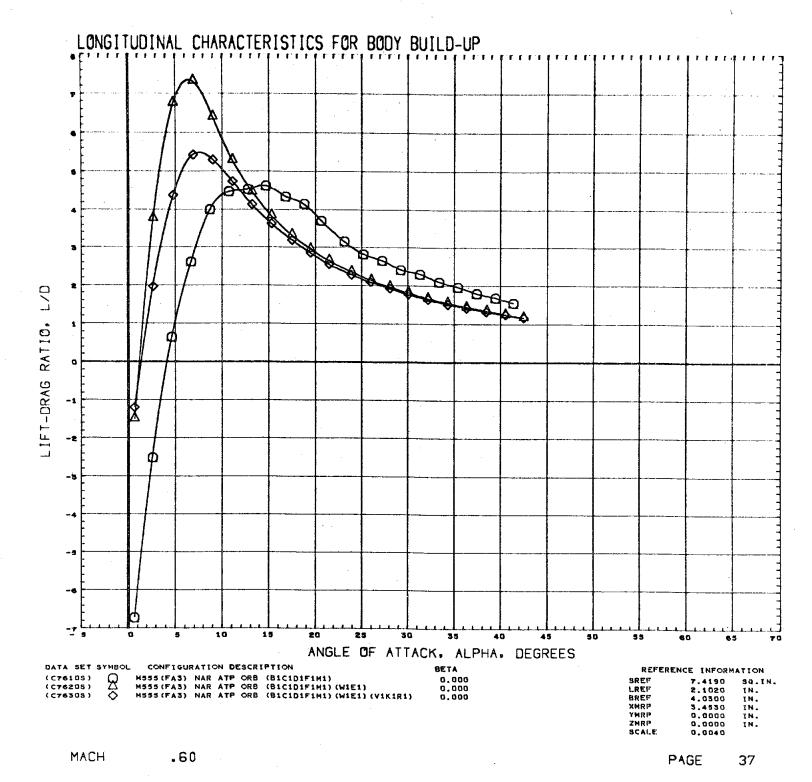
PAGE

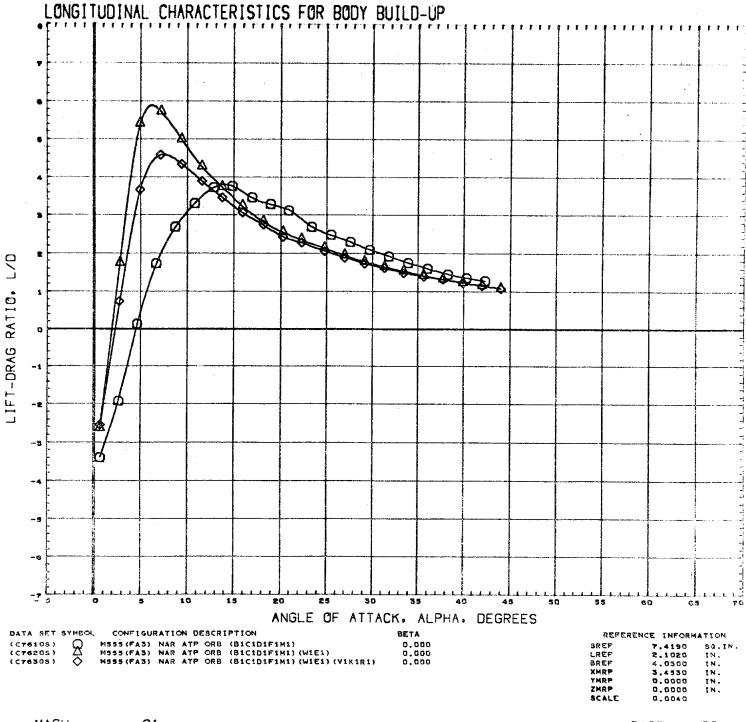




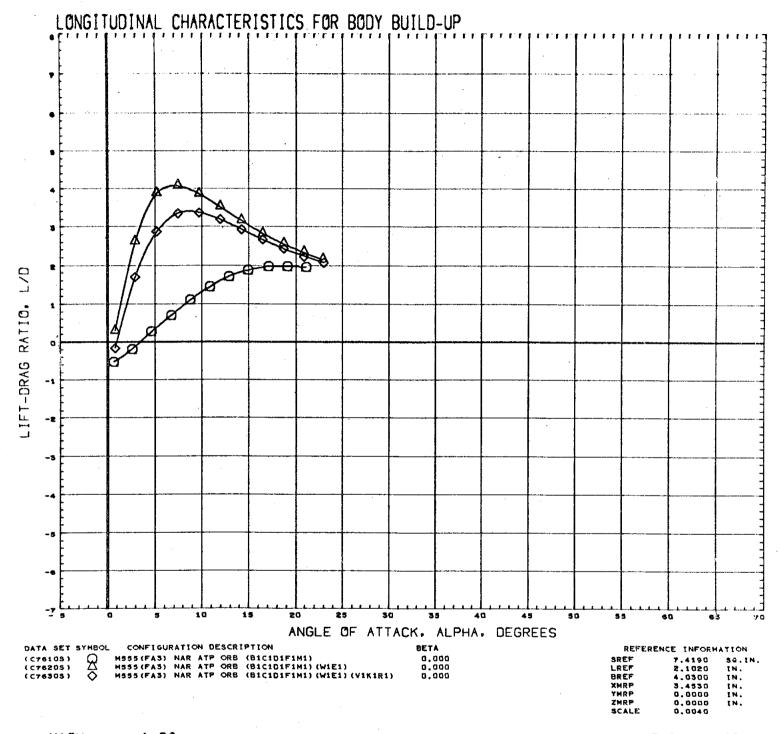






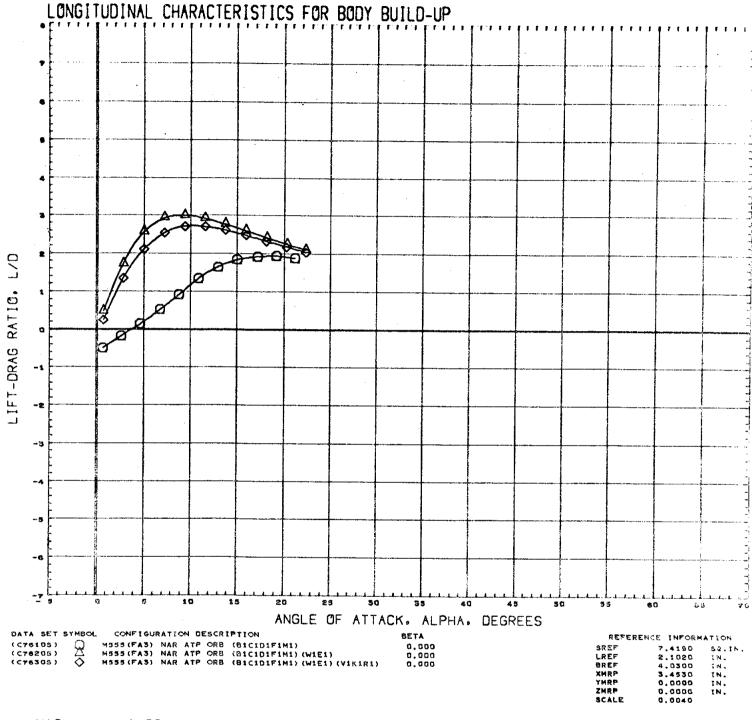


PAGE



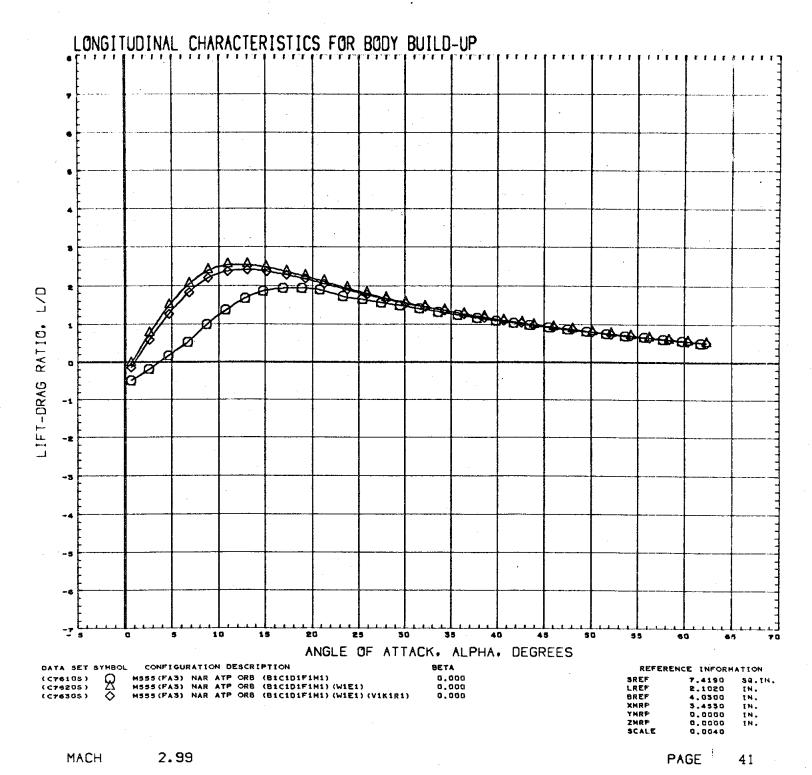
MACH 1.20

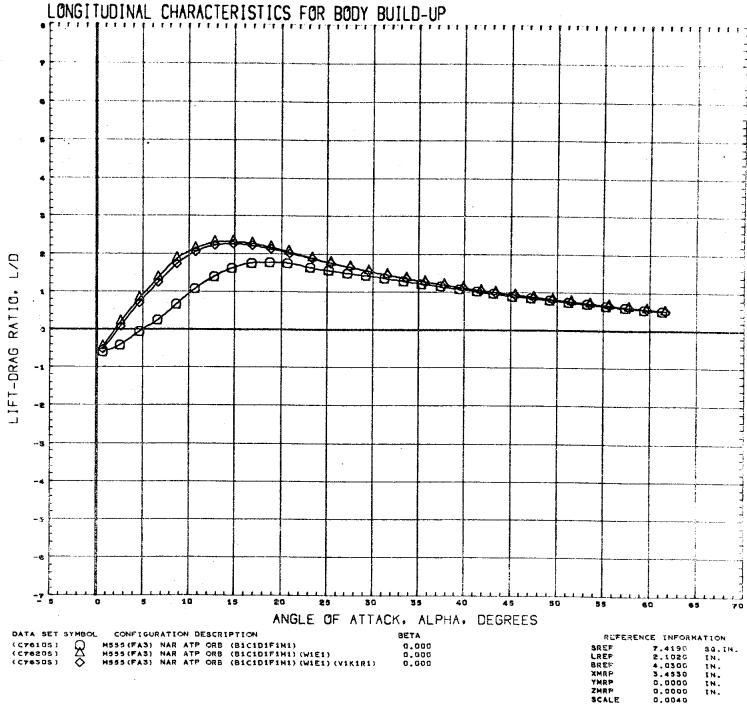
PAGE



MACH 1.96

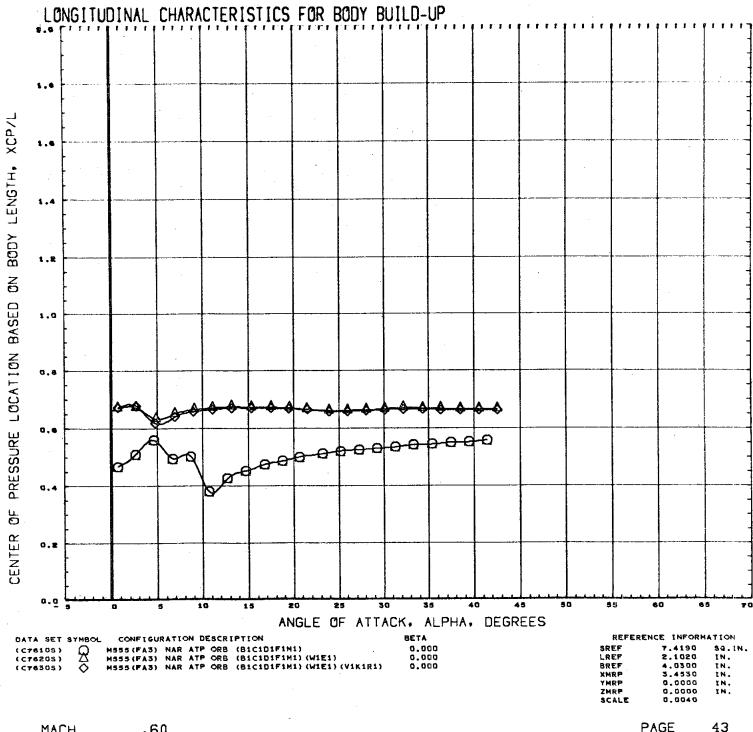
PAGE





MACH 4.96

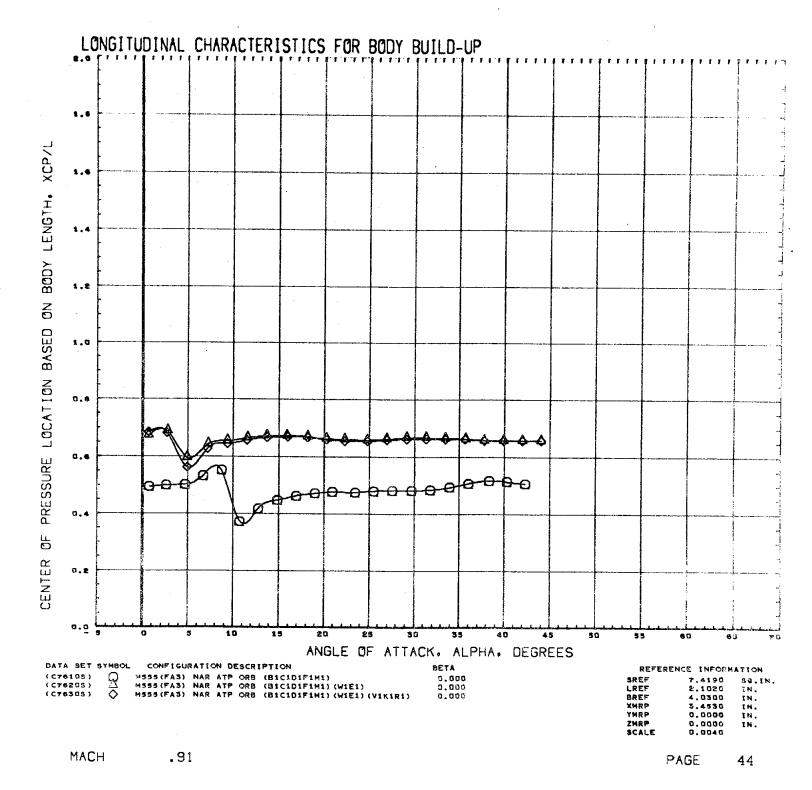
PAGE

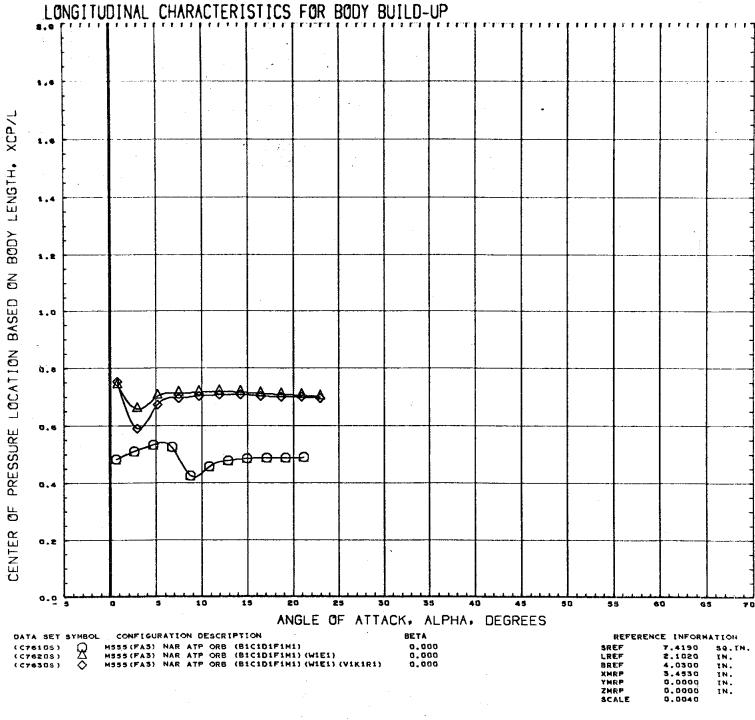


MACH

.60

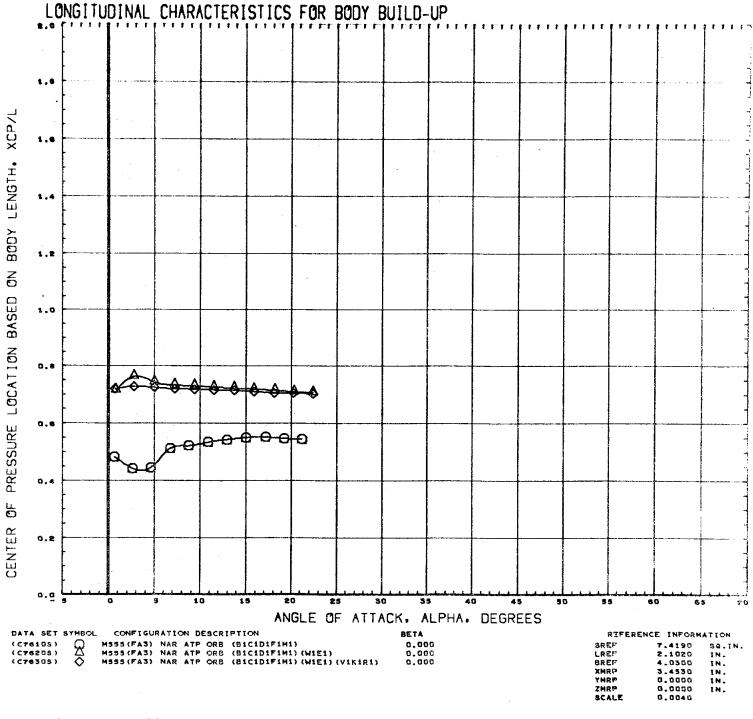
PAGE





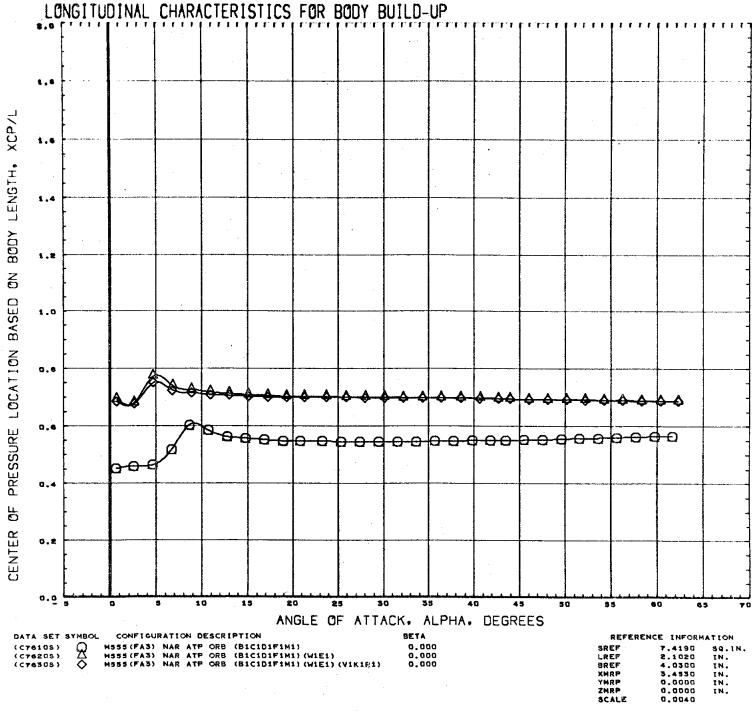
MACH 1.20

PAGE



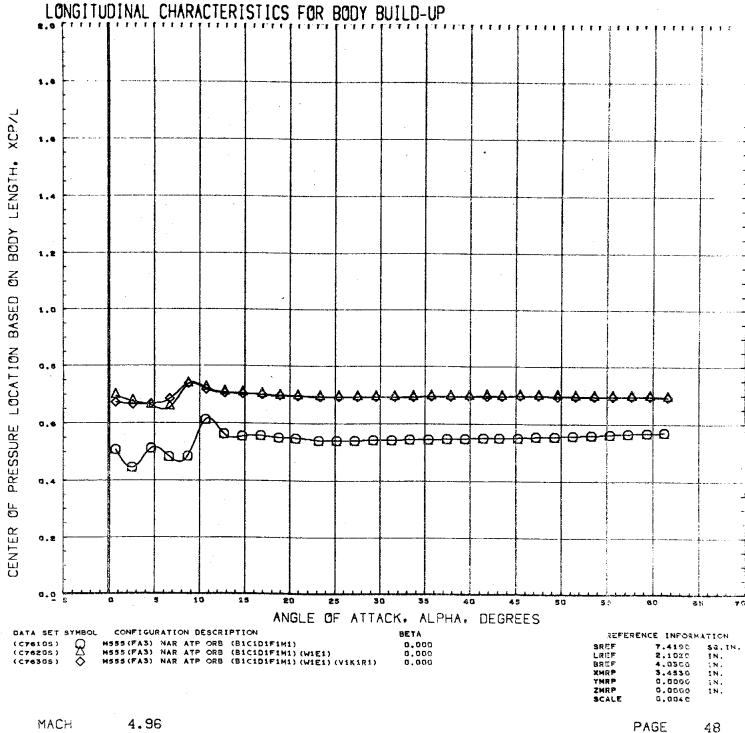
MACH 1.96

PAGE



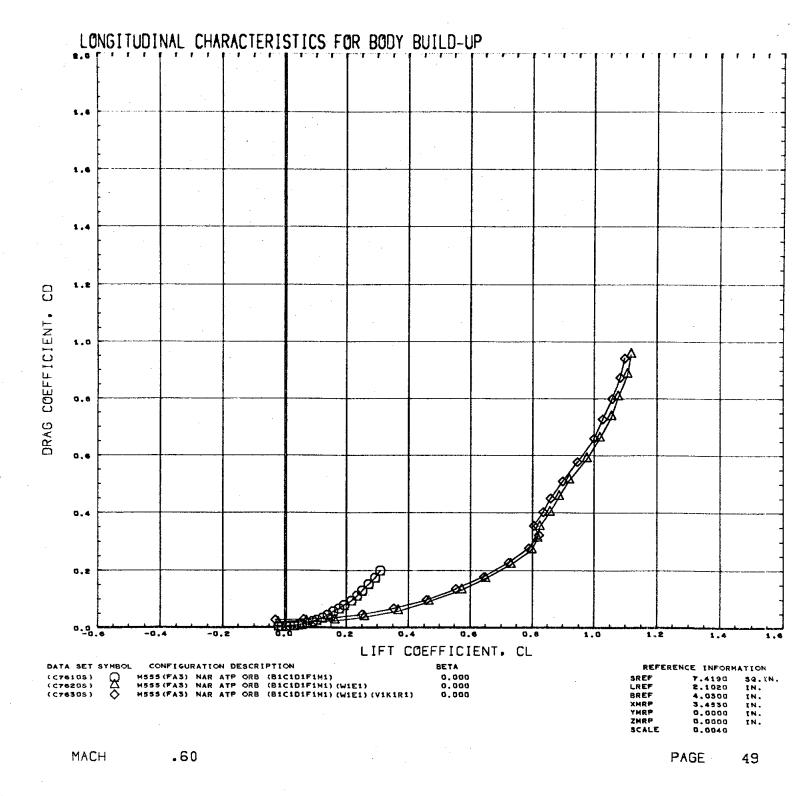
MACH 2.99

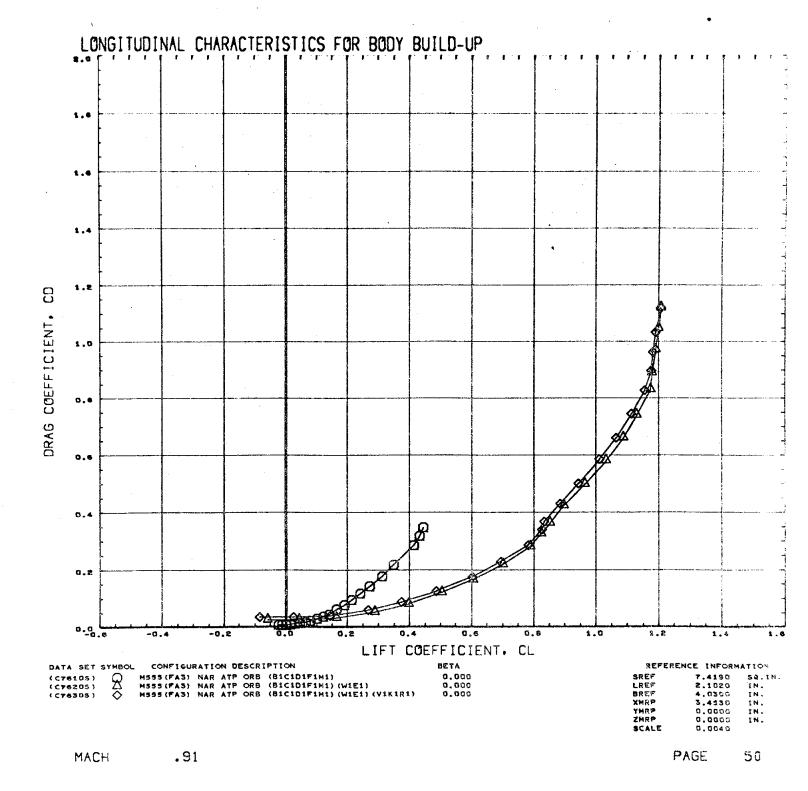
PAGE

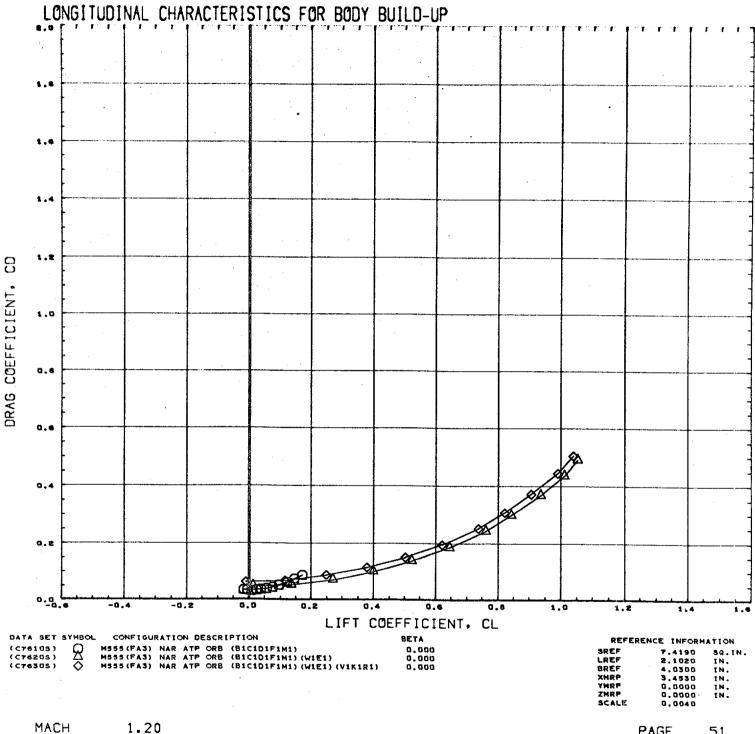


MACH 4.96

PAGE

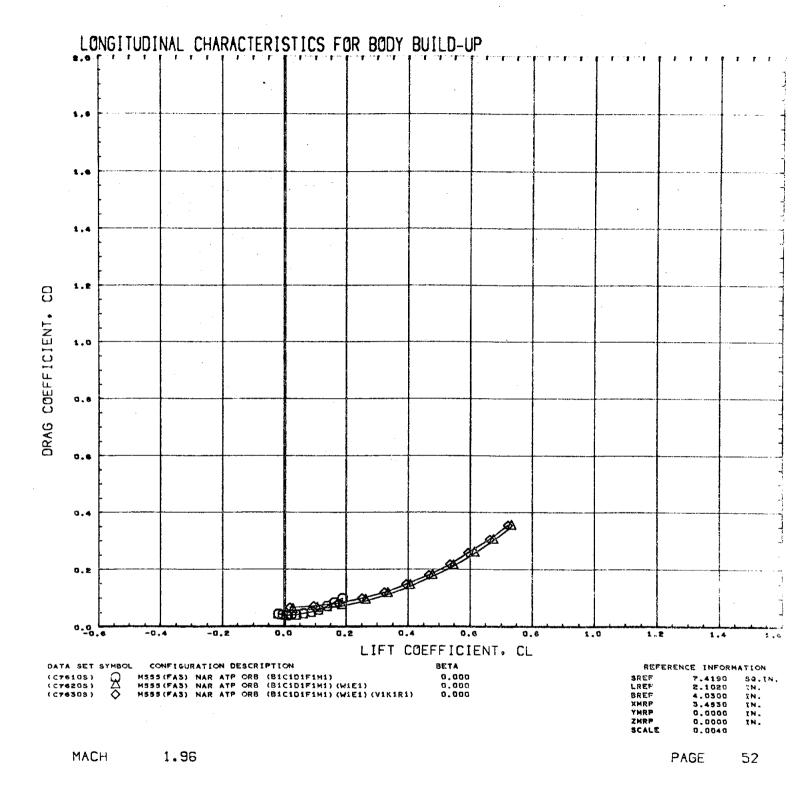


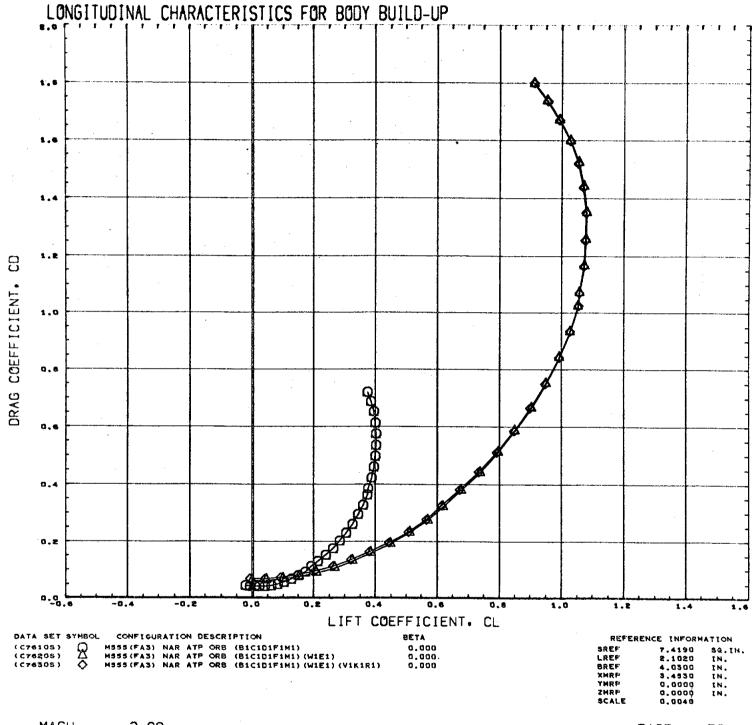




MACH

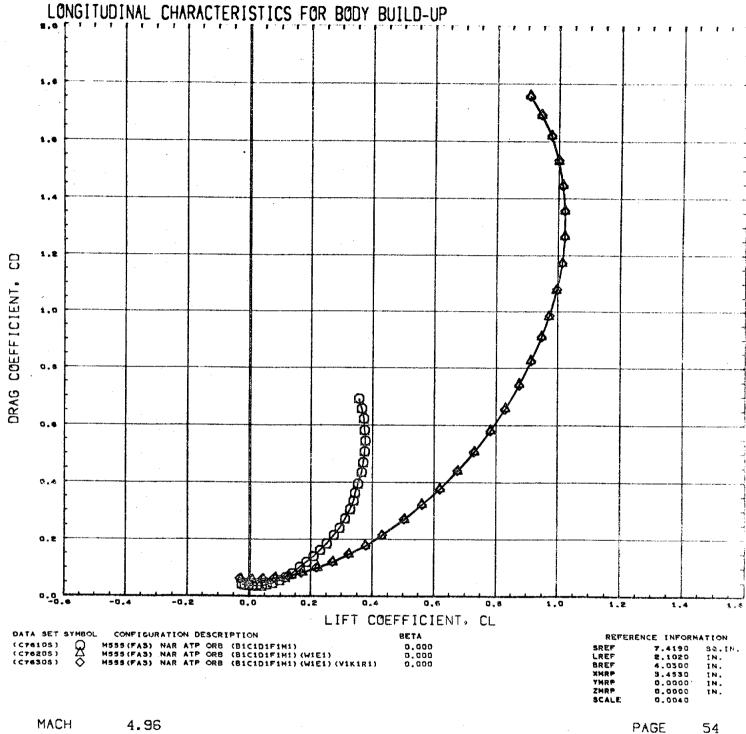
PAGE



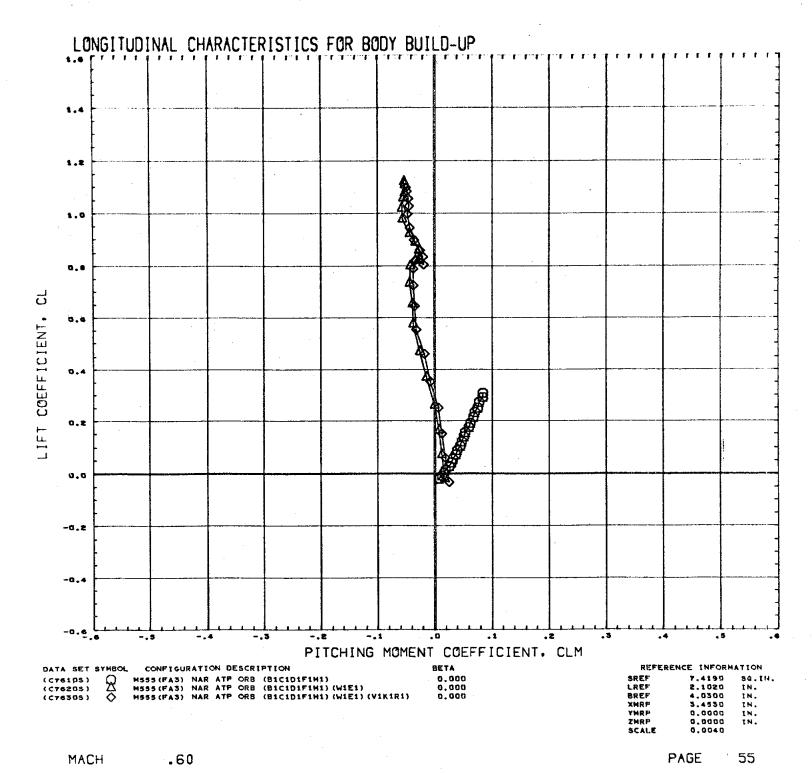


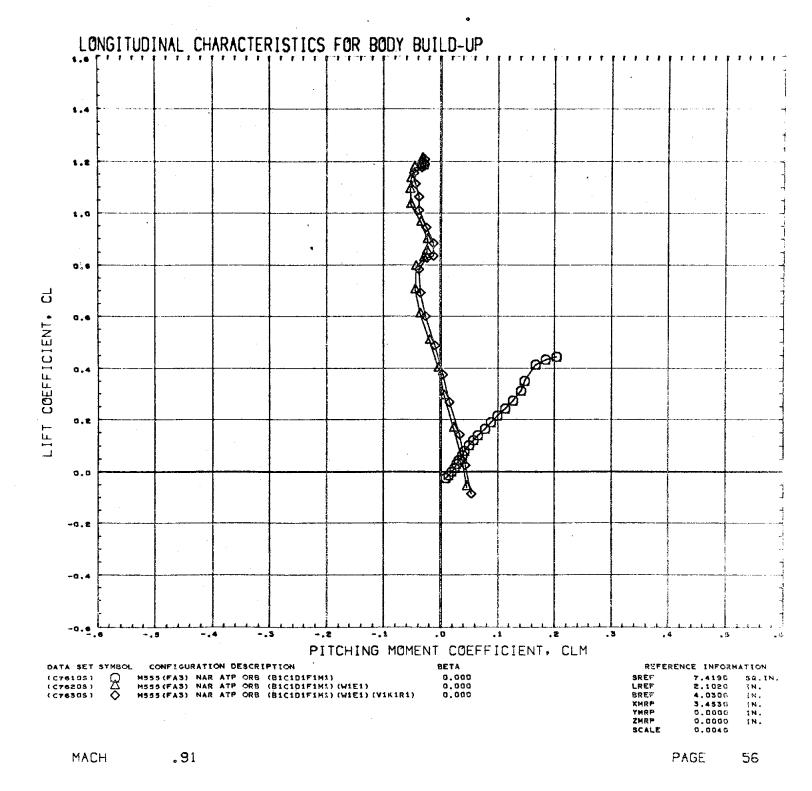
MACH 2.99

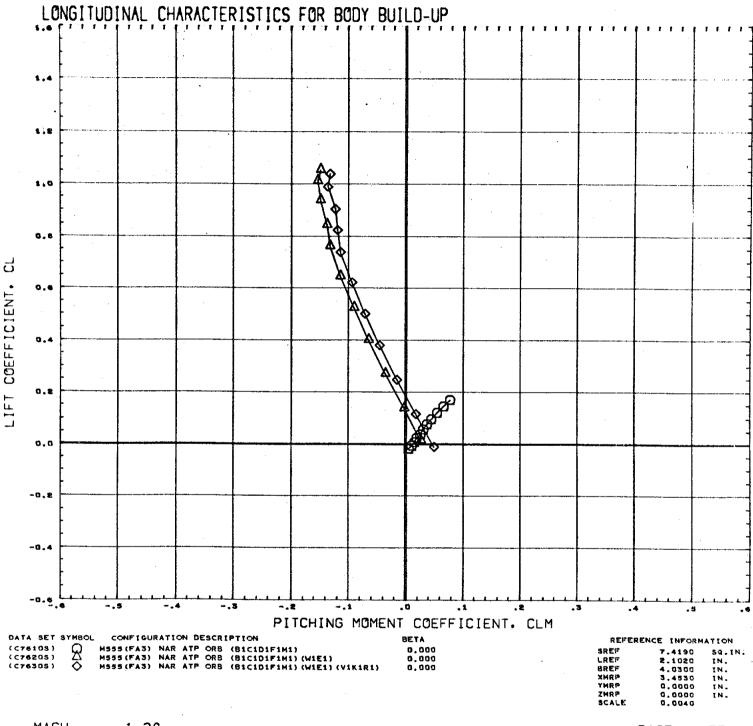
PAGE



PAGE



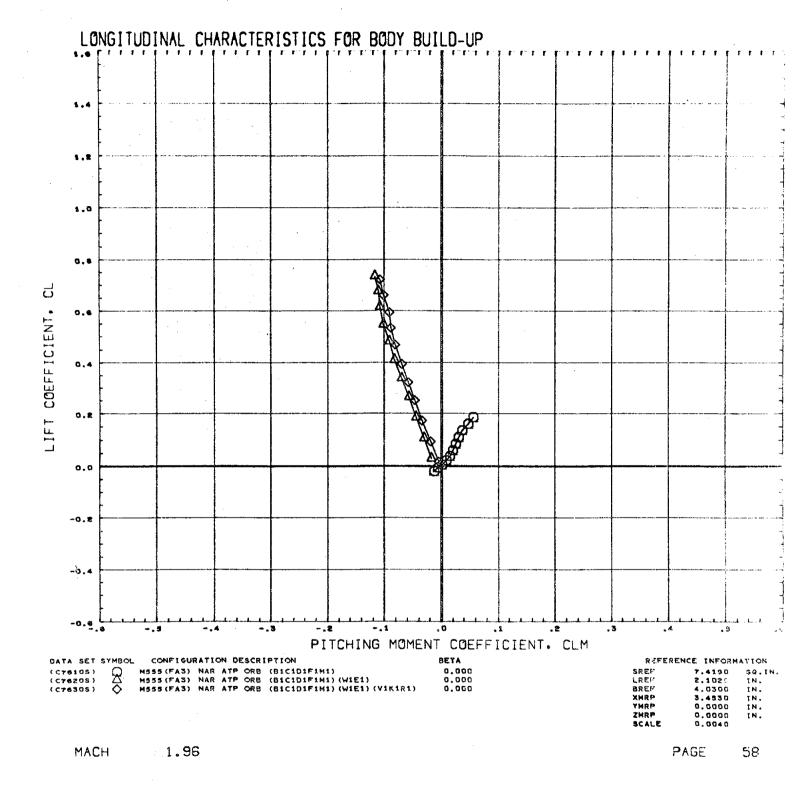


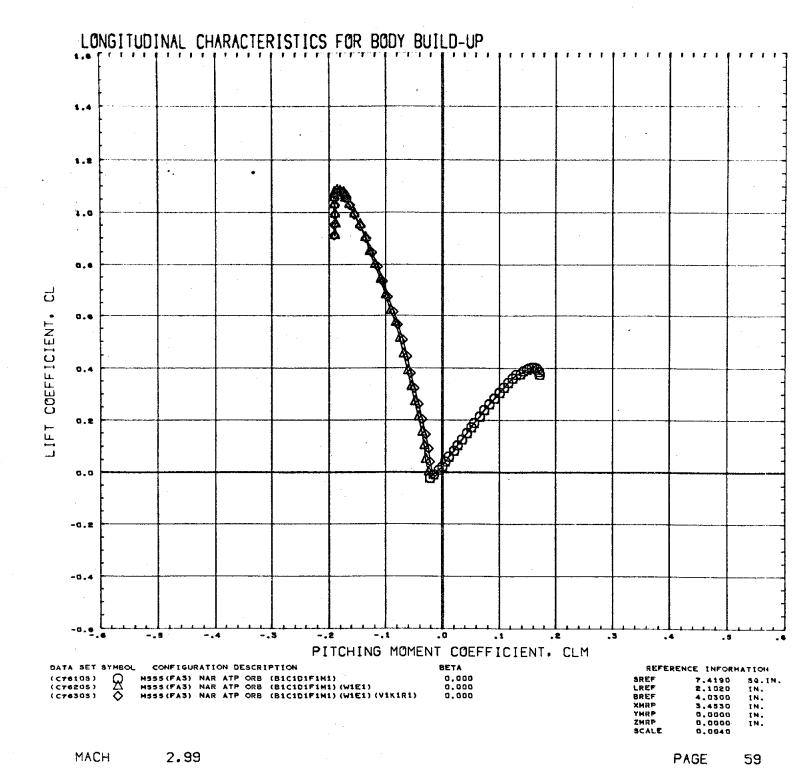


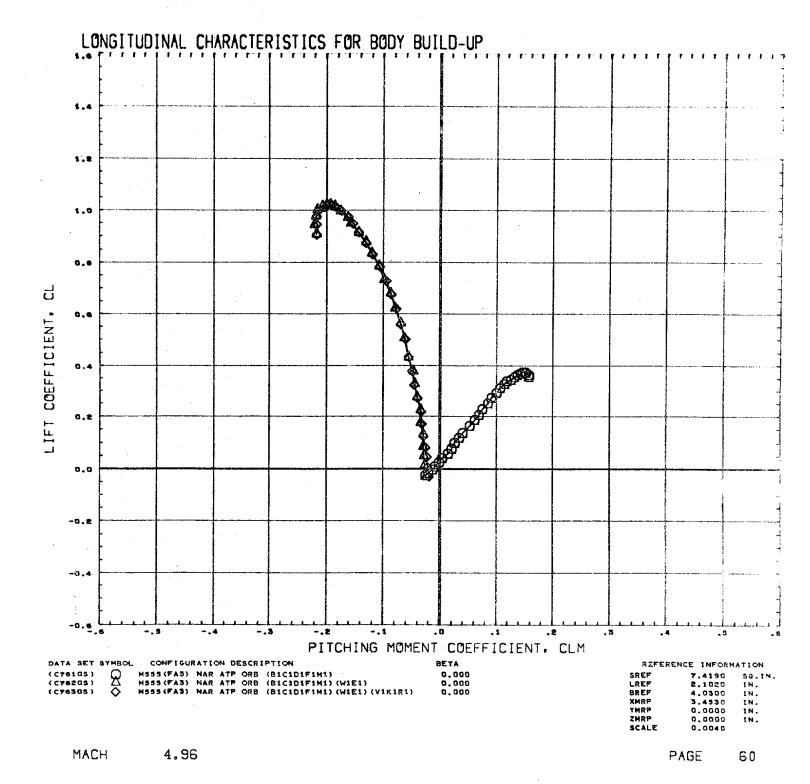
MACH

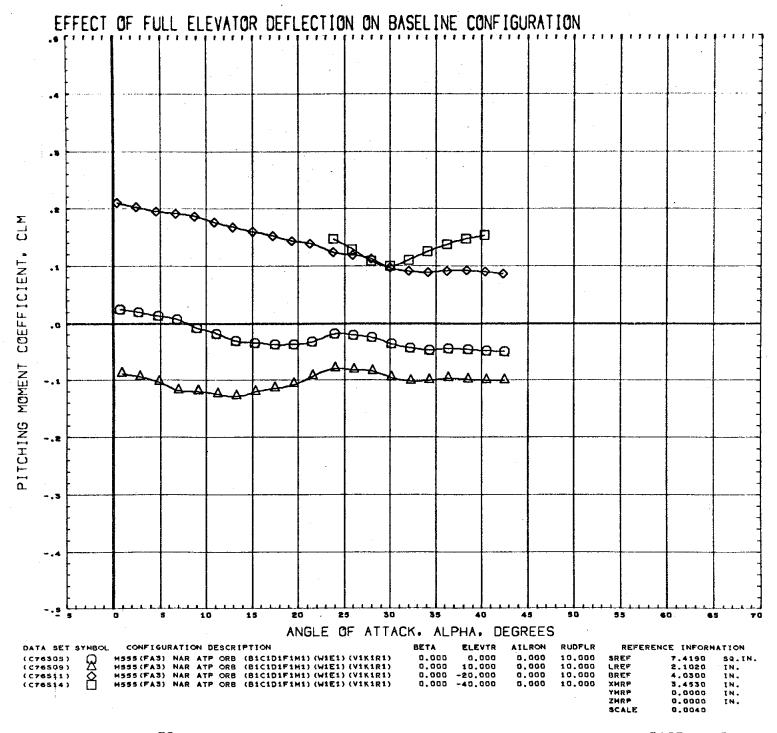
1.20

PAGE



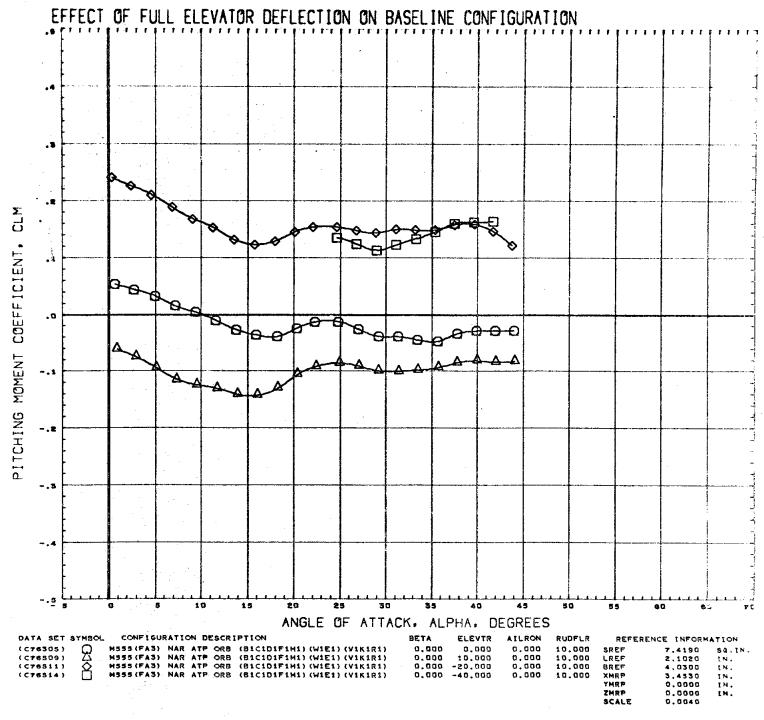






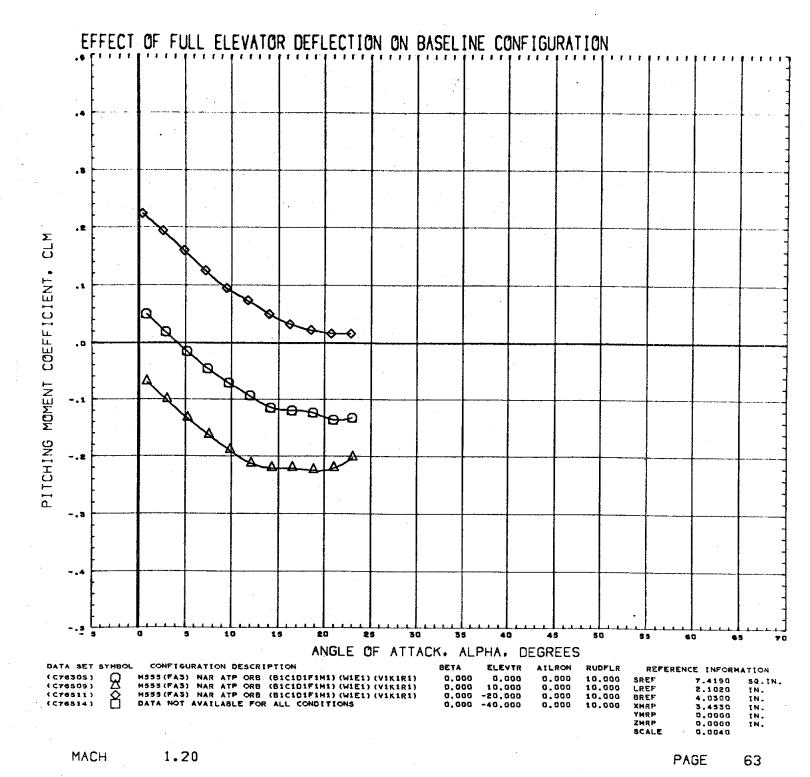
MACH .59

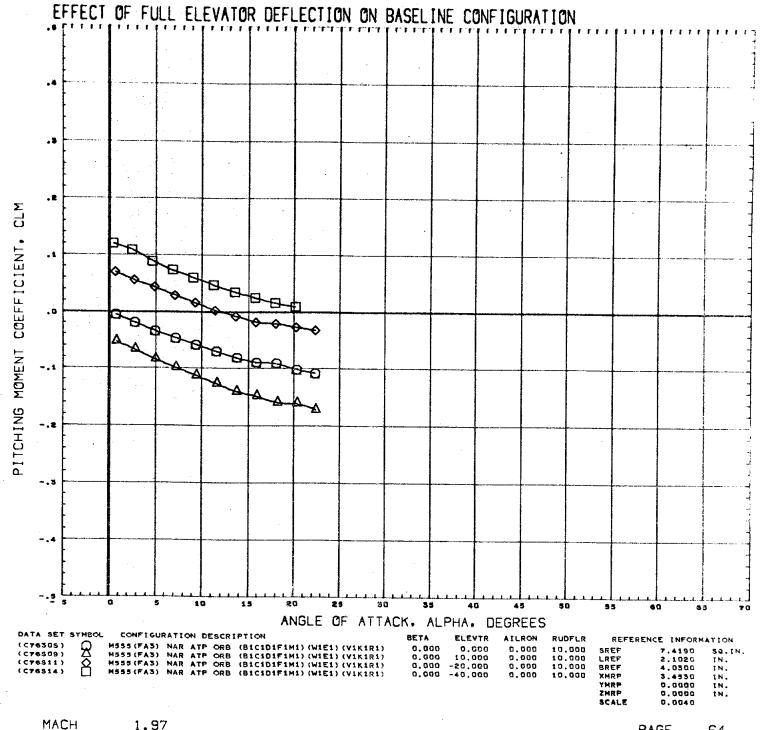
PAGE



MACH .90

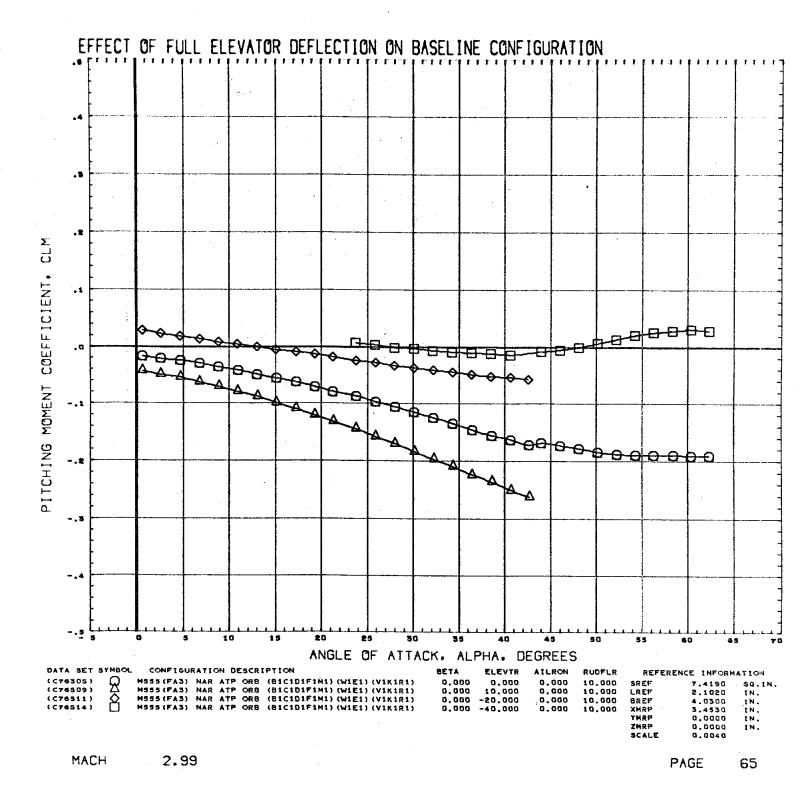
PAGE

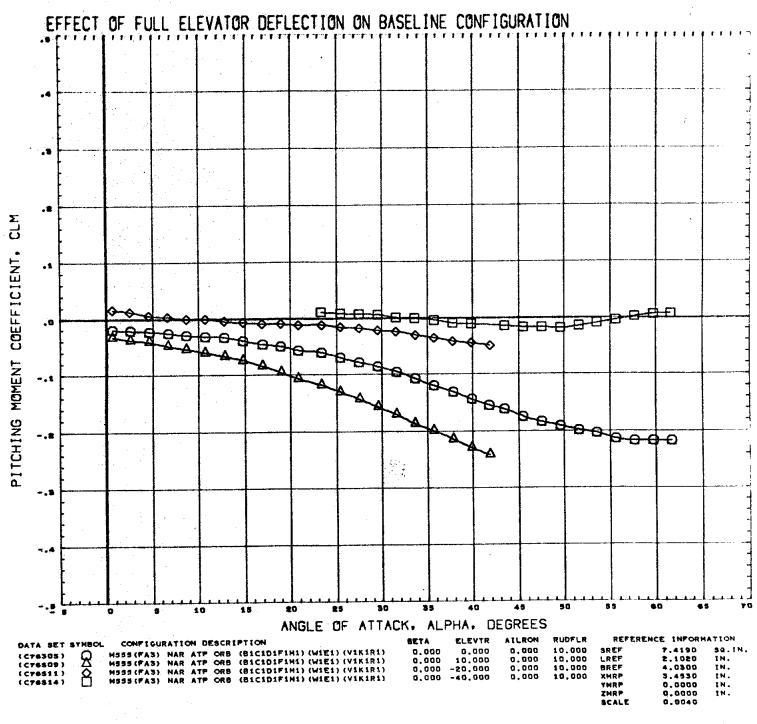




1.97

PAGE

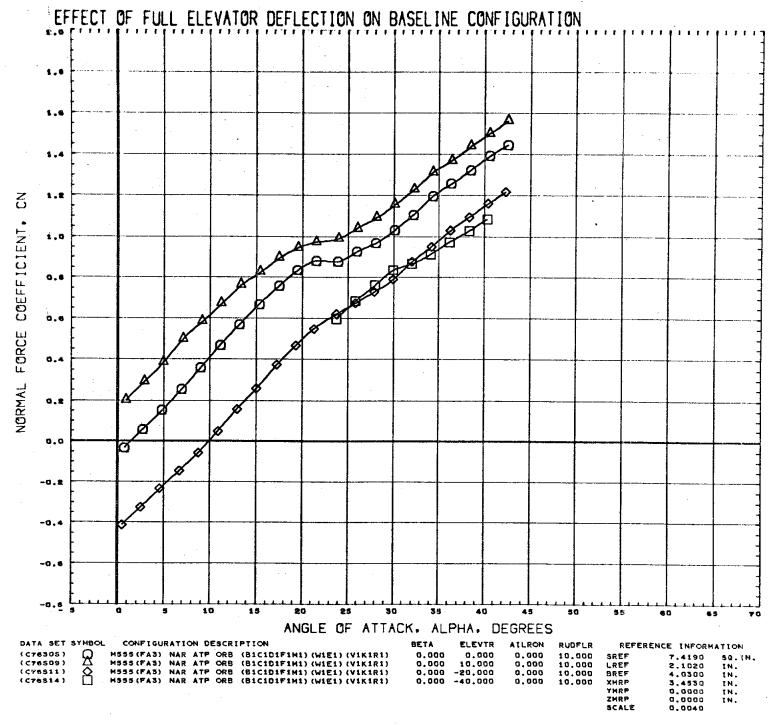




PAGE

66

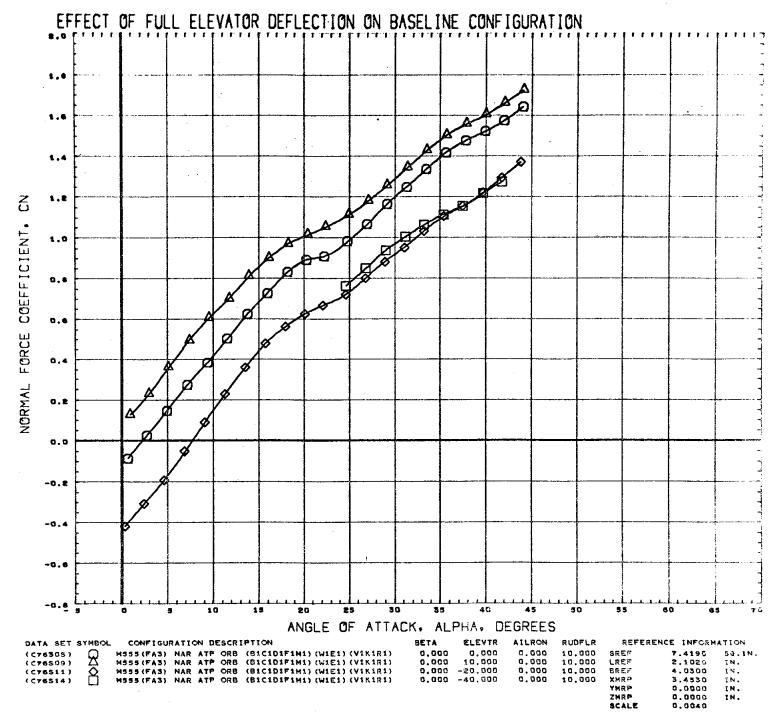
MACH 4.96



MACH

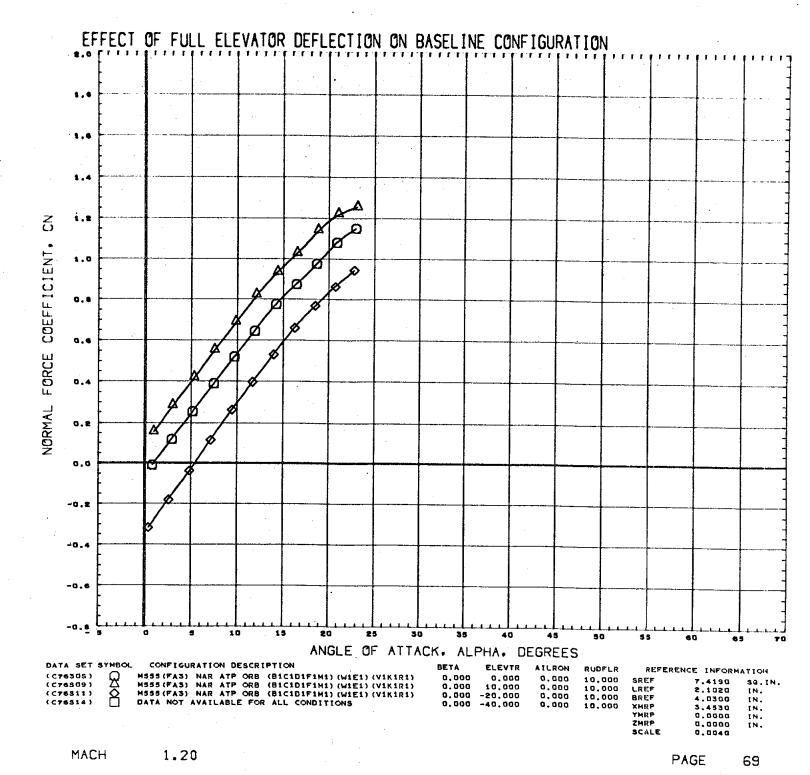
.59

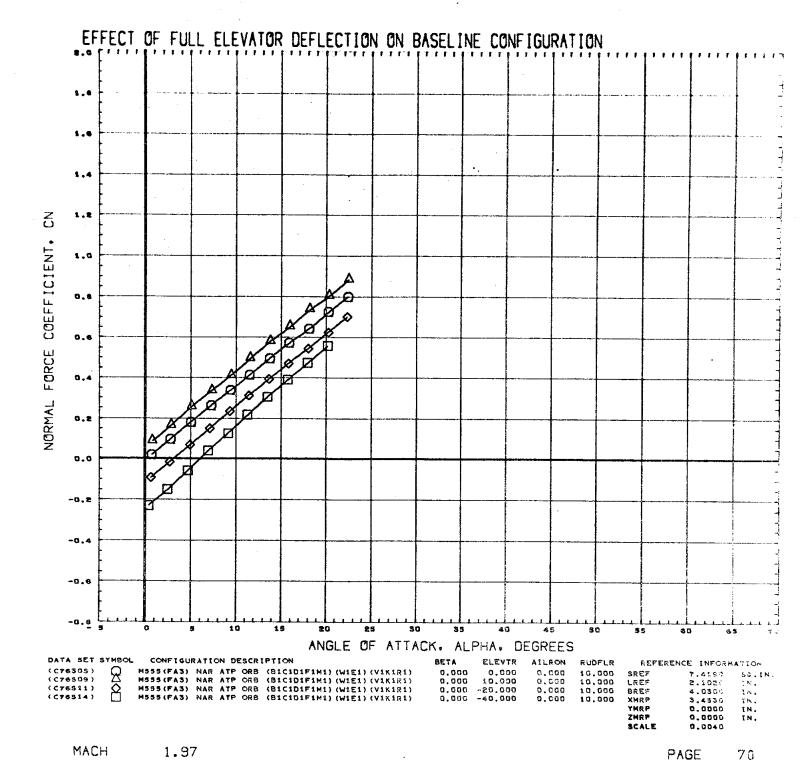
PAGE

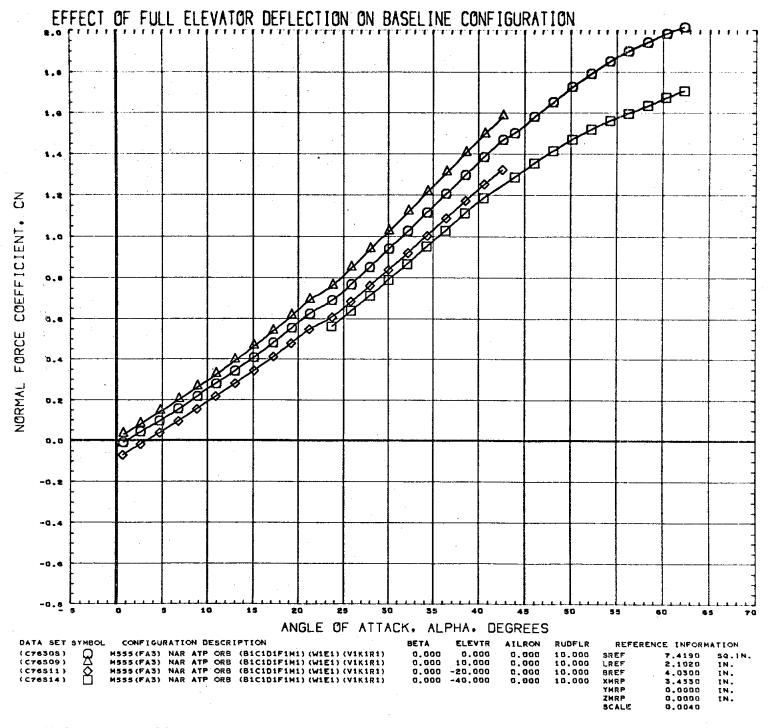


MACH .90

PAGE

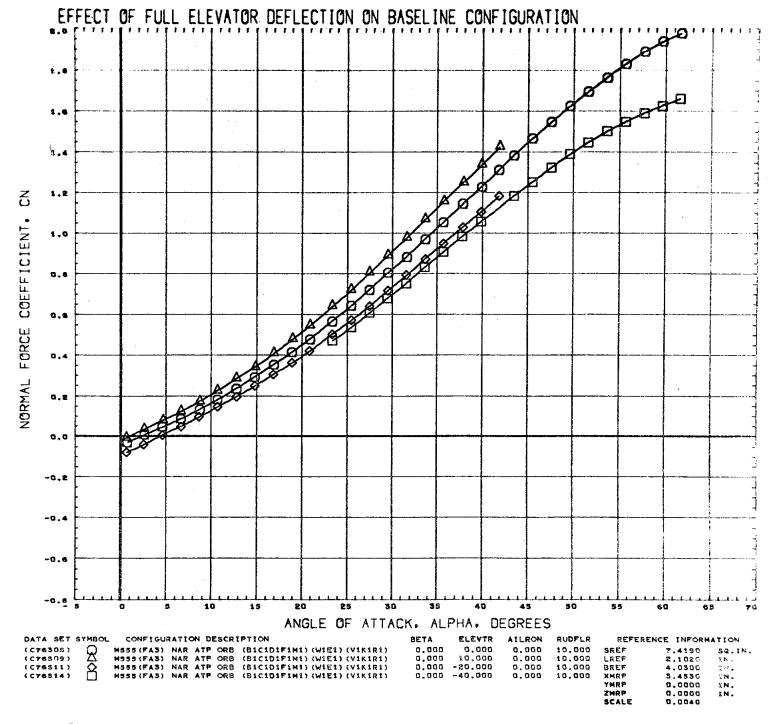






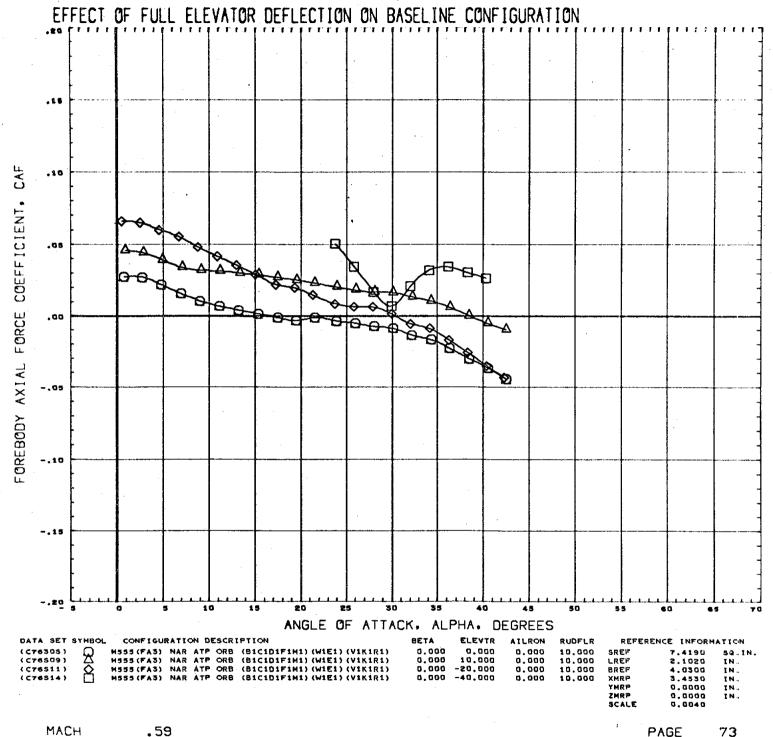
MACH 2.99

PAGE

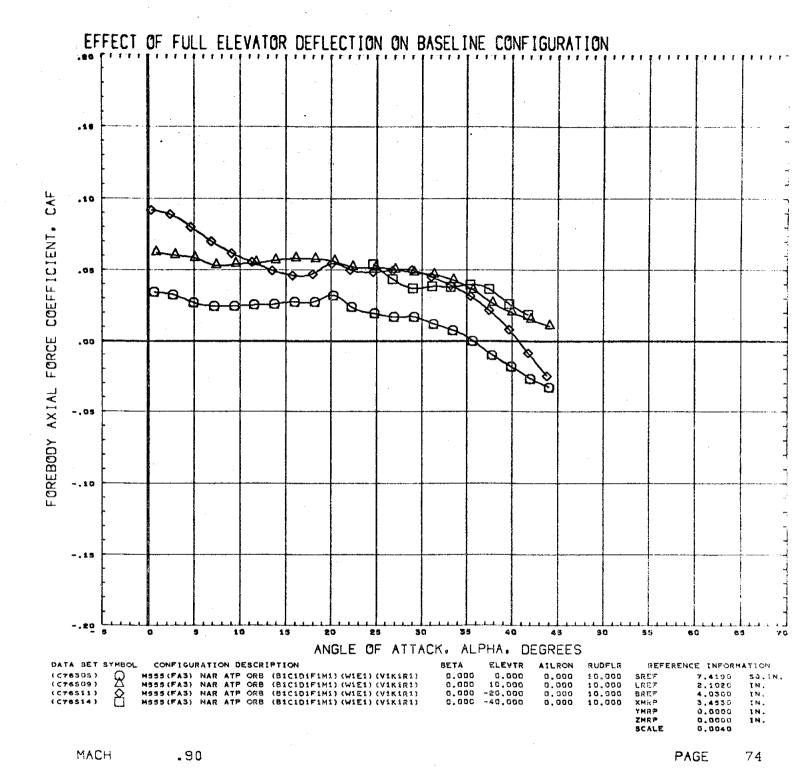


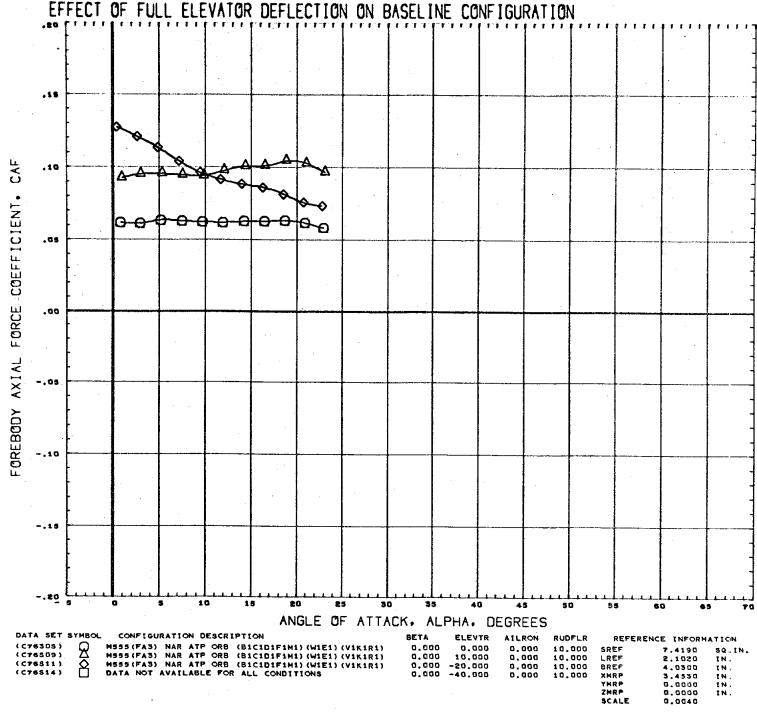
MACH 4.96

PAGE



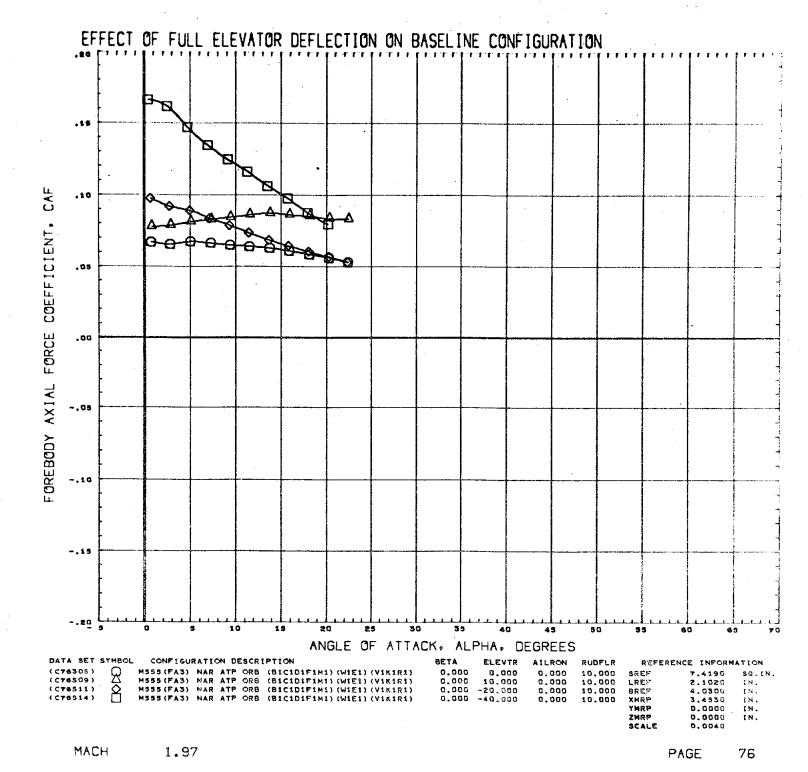
MACH .59 PAGE

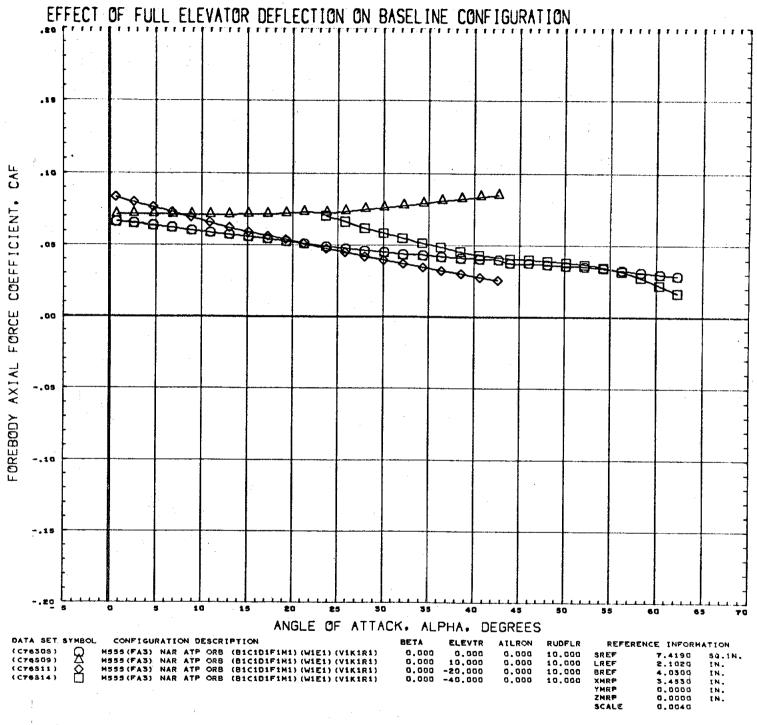




1.20

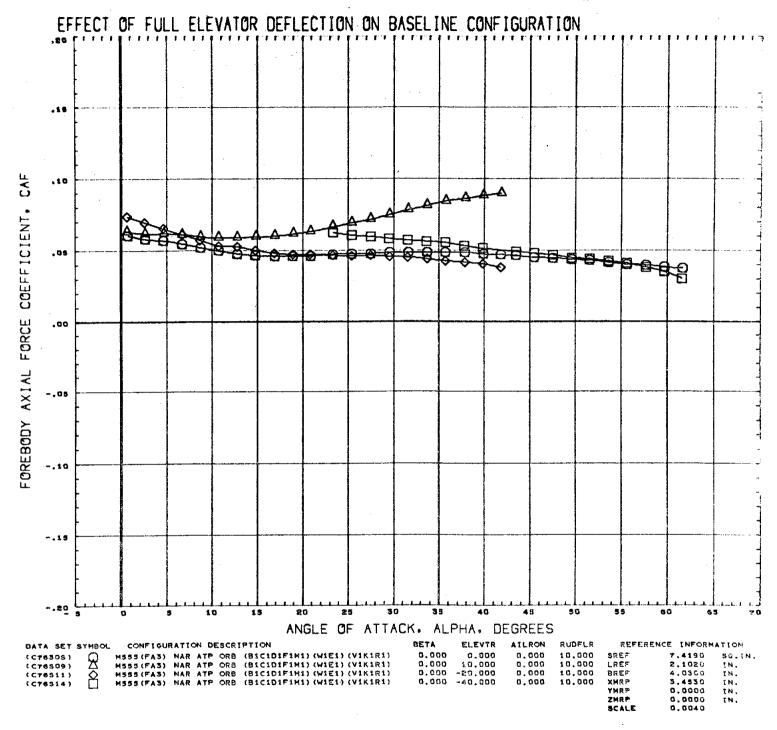
PAGE





MACH 2.99

PAGE

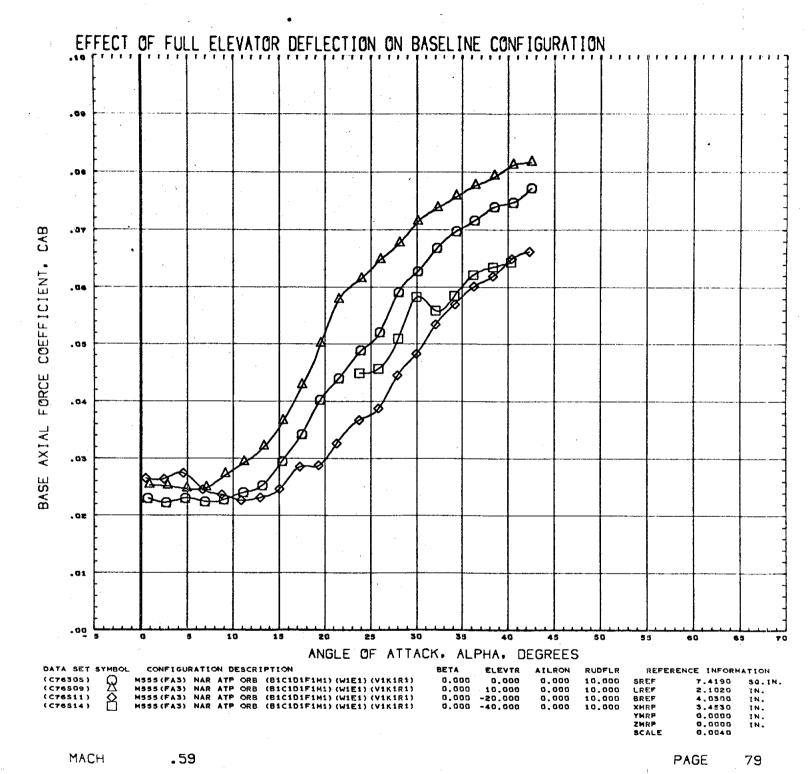


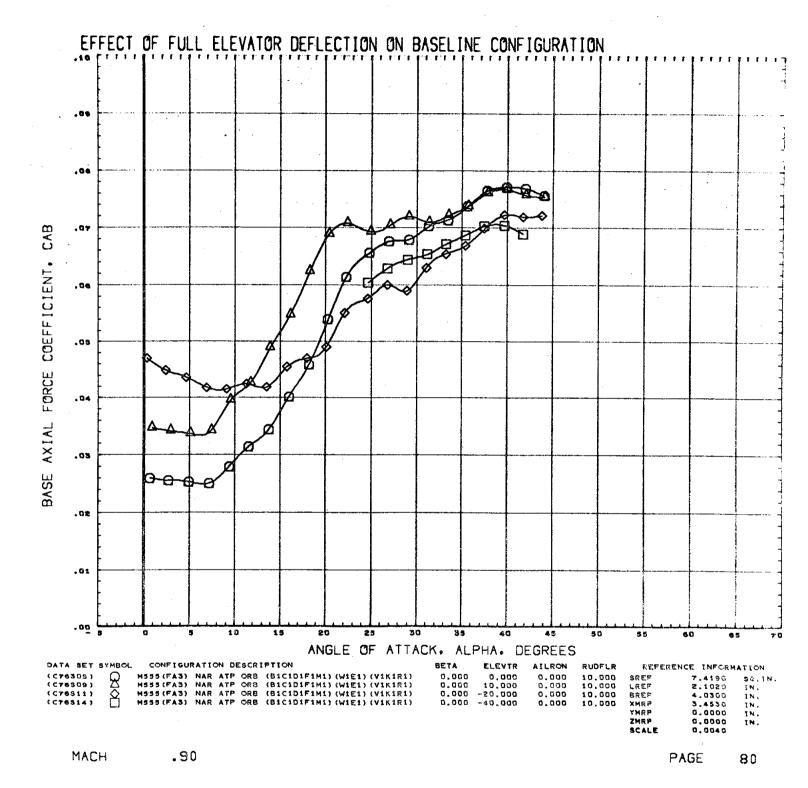
PAGE

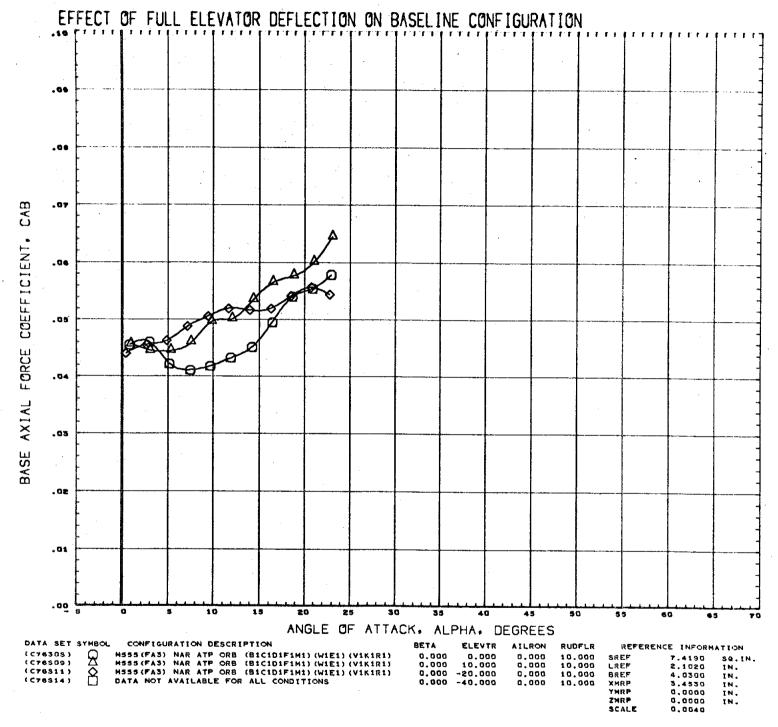
78

4.96

MACH

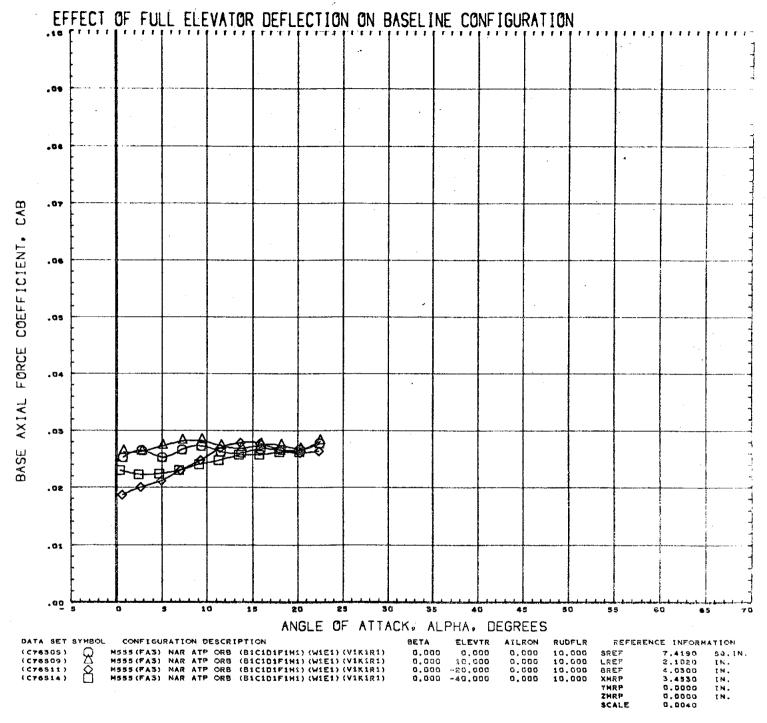






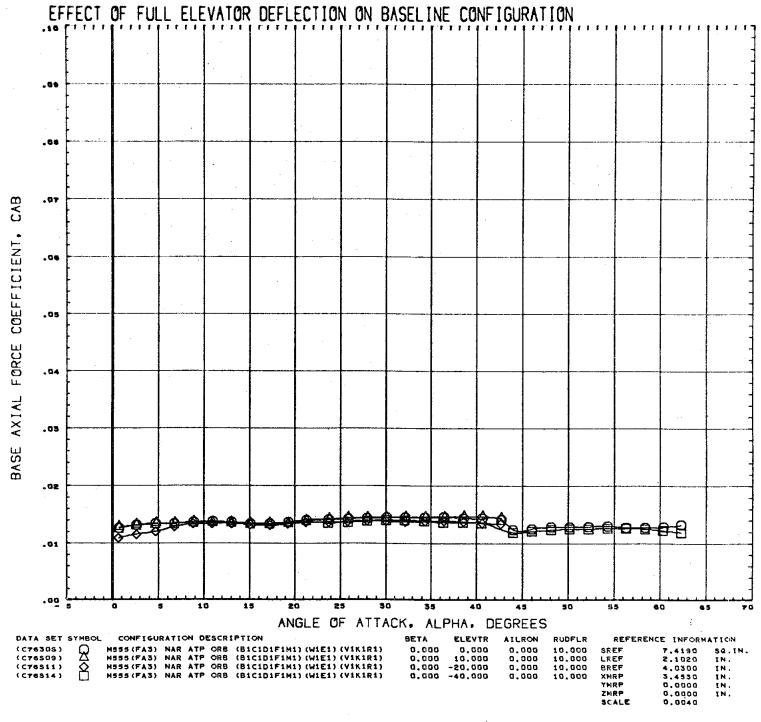
1.20

PAGE



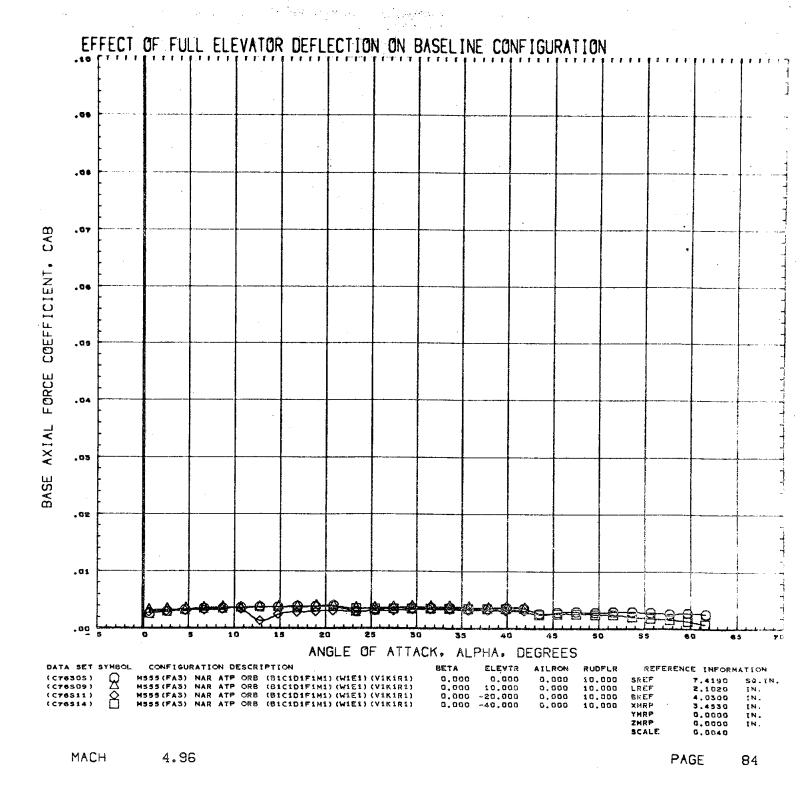
1.97

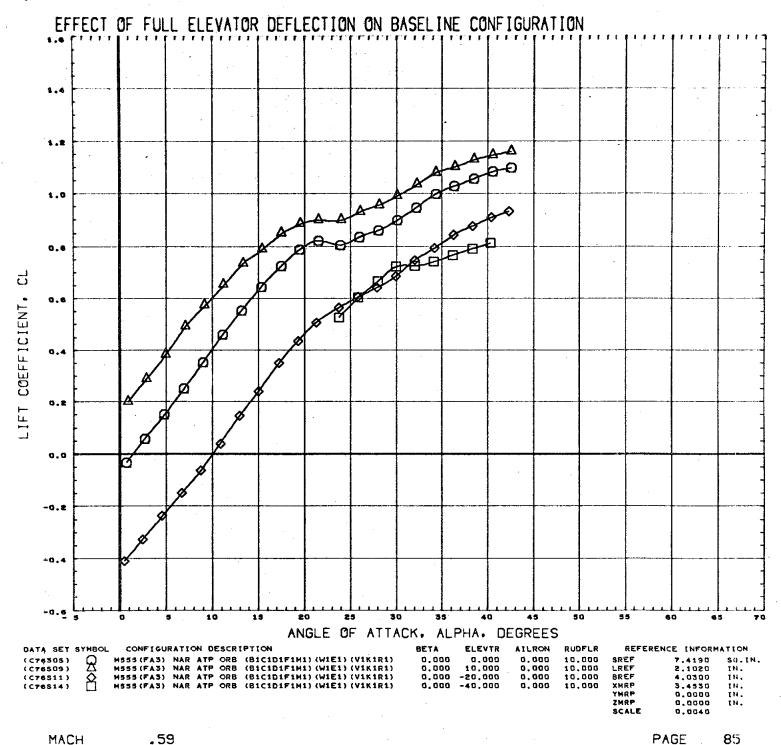
PAGE



2.99

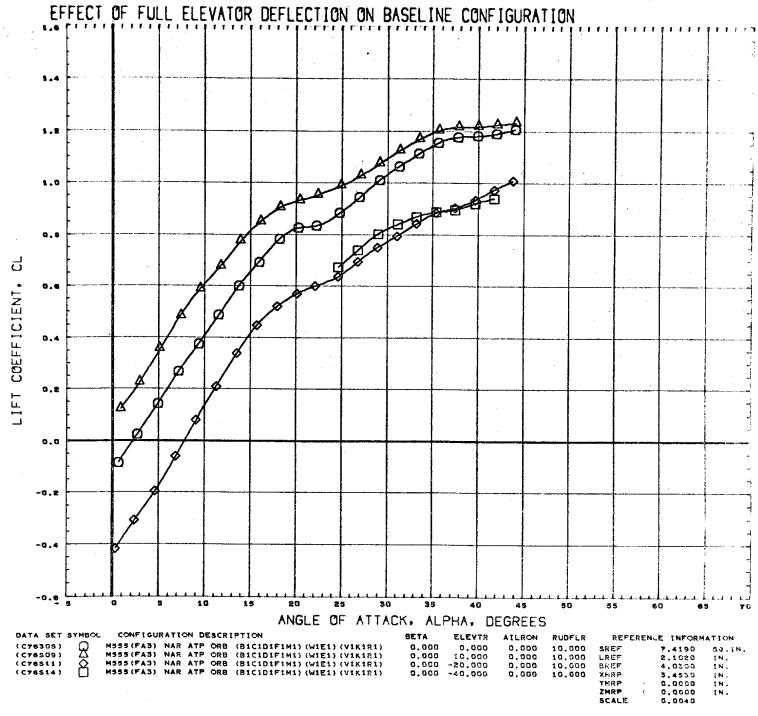
PAGE





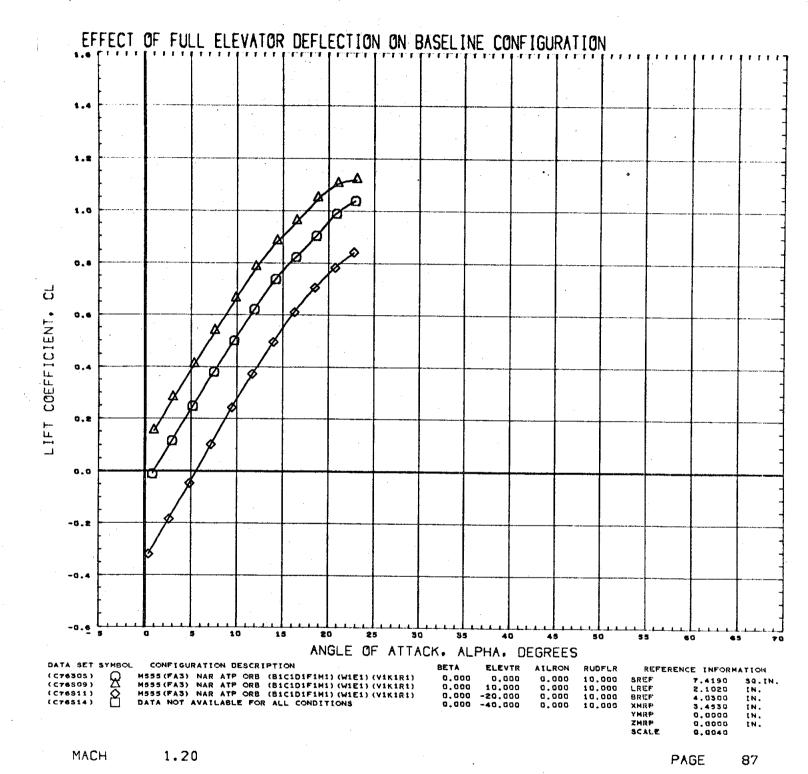
.59

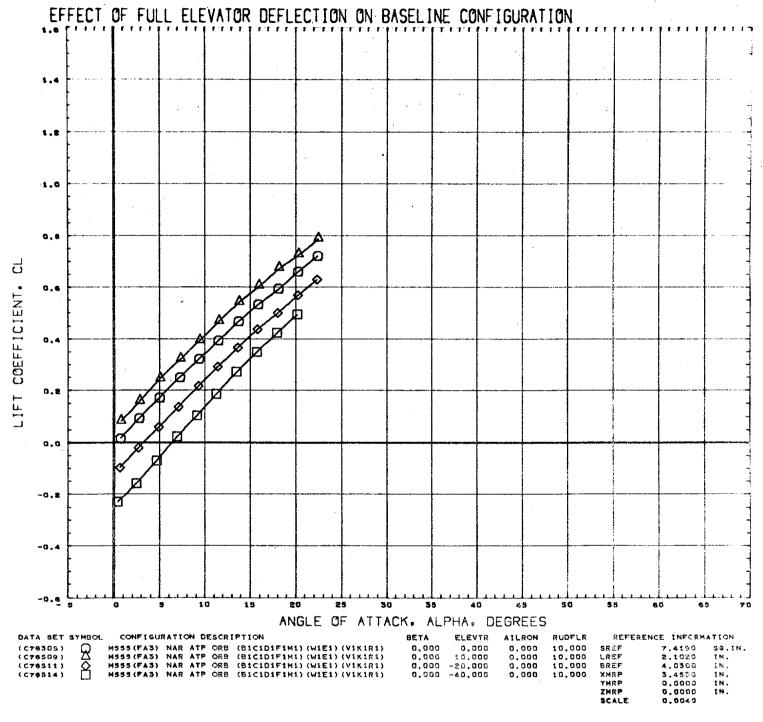
PAGE .



MACH .90

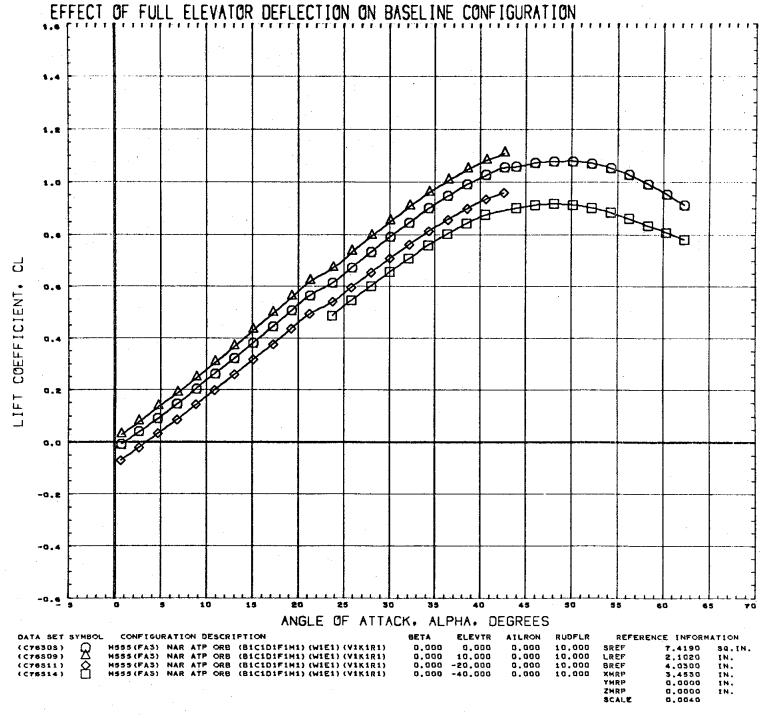
PAGE





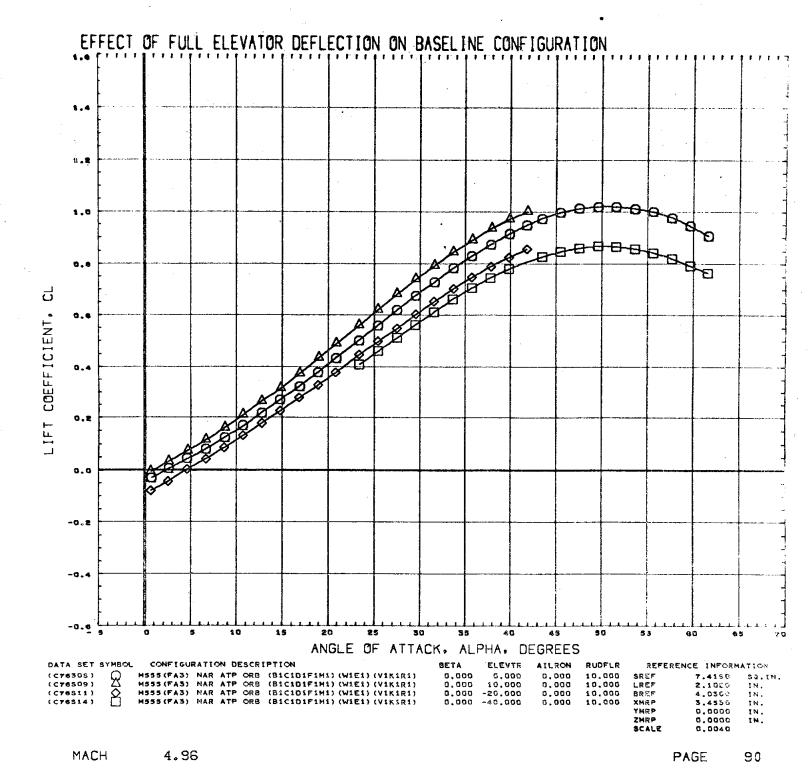
MACH 1.97

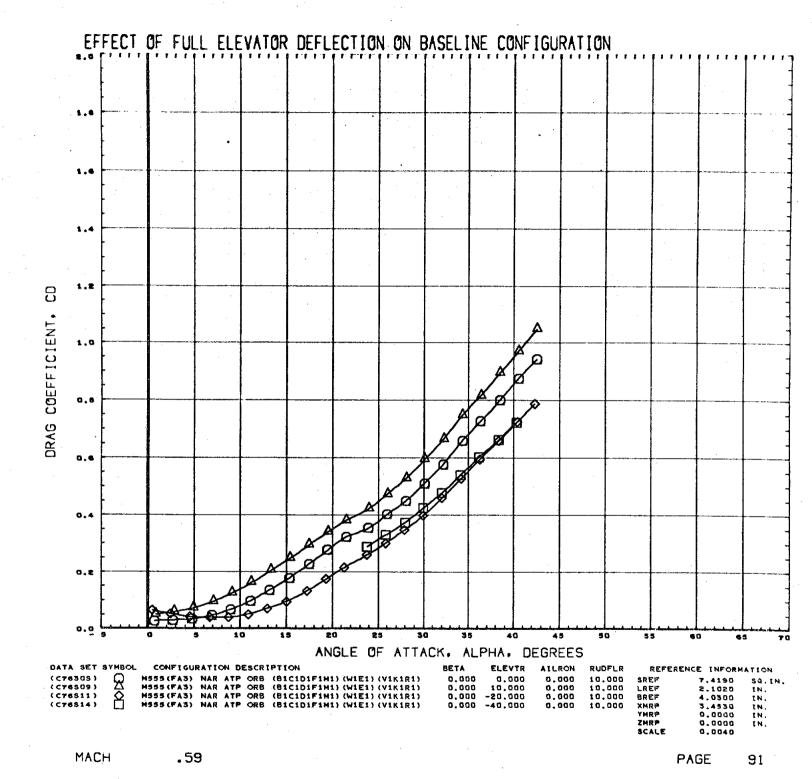
PAGE

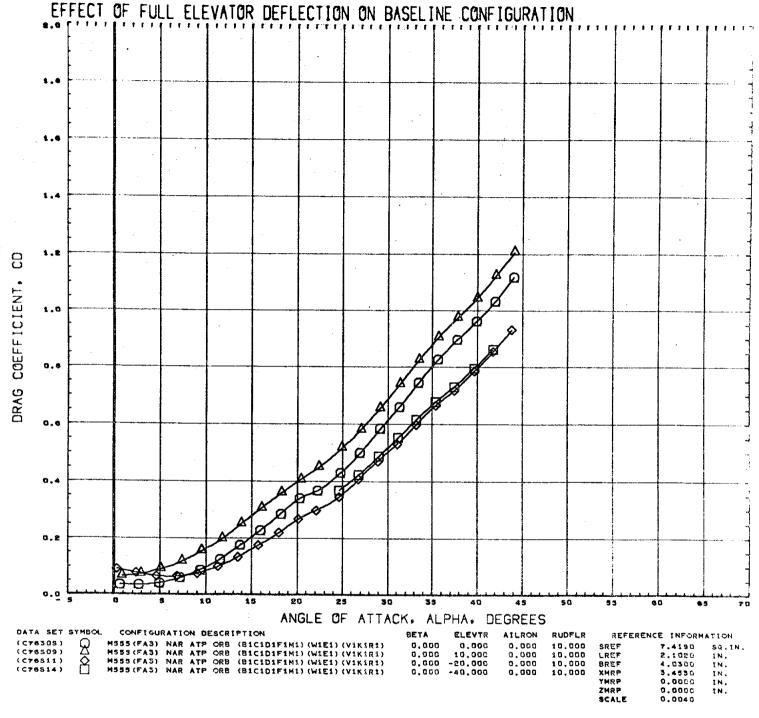


MACH 2.99

PAGE

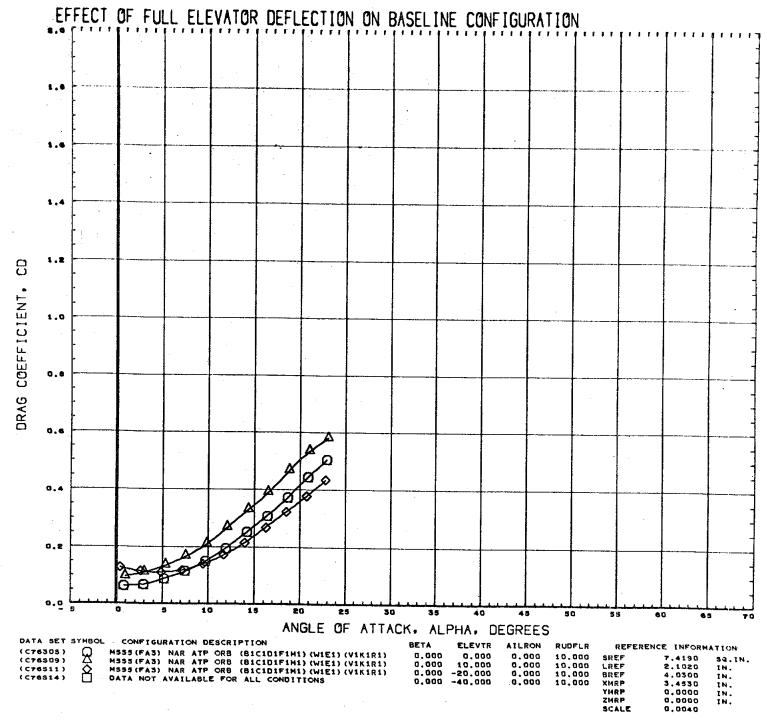






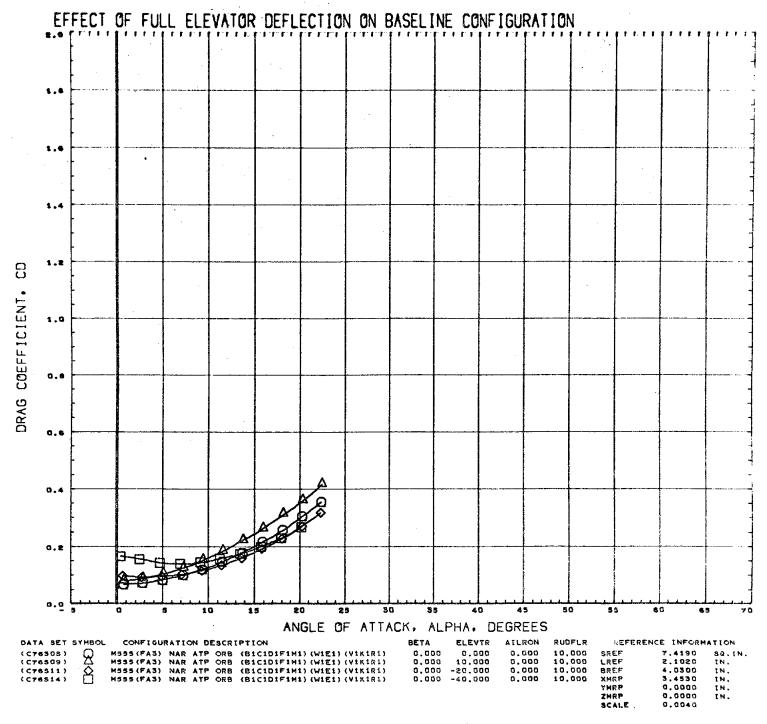
.90

PAGE



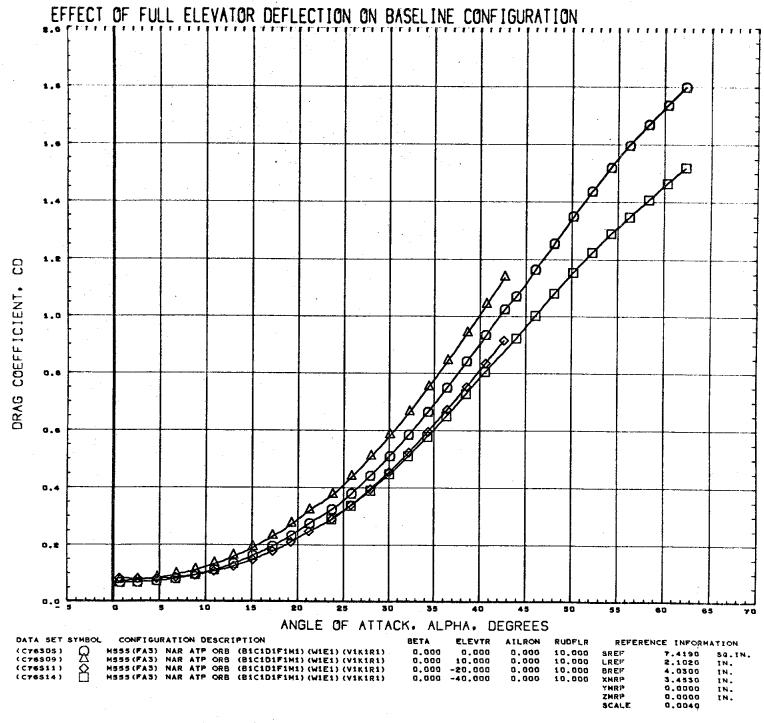
1.20

PAGE



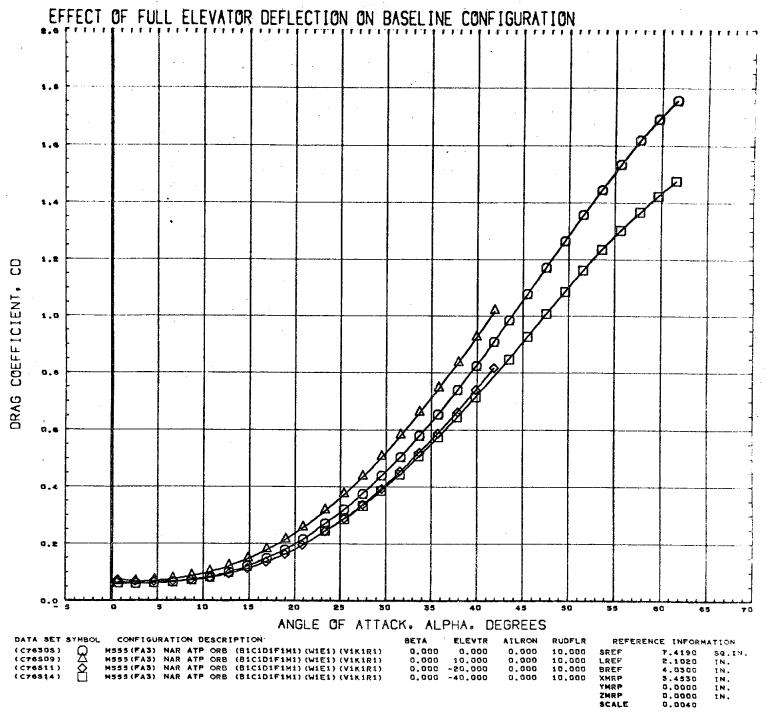
1.97

PAGE



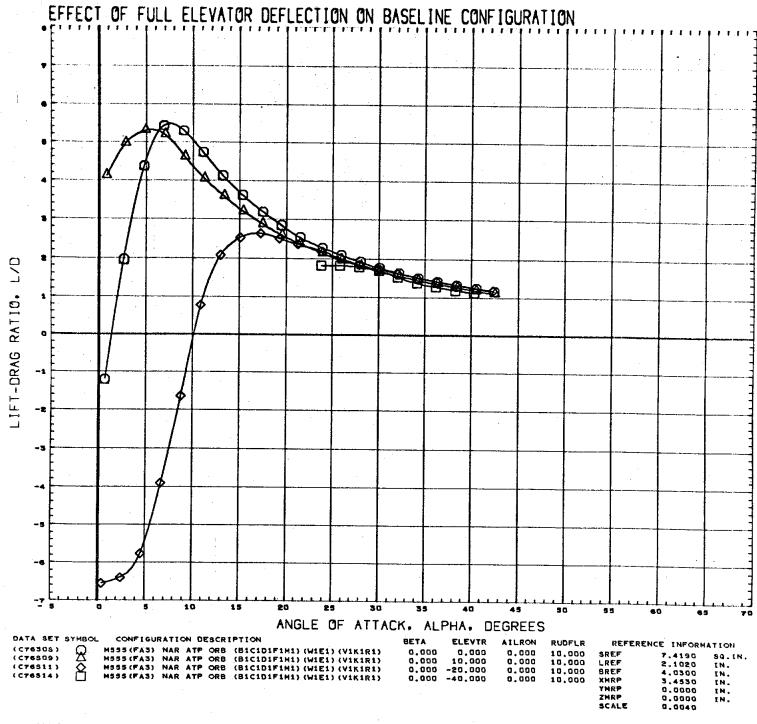
2.99

PAGE



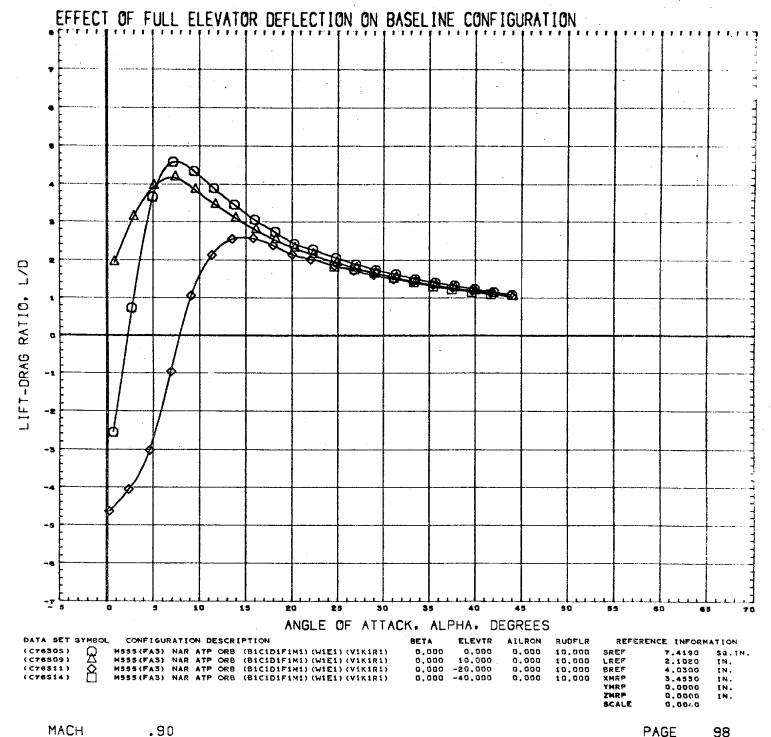
MACH 4.96

PAGE

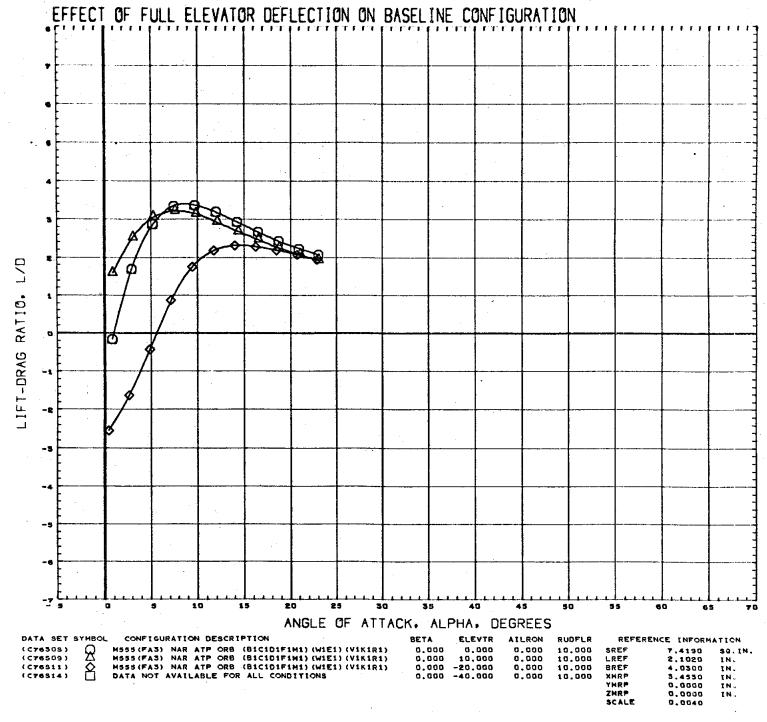


.59

PAGE

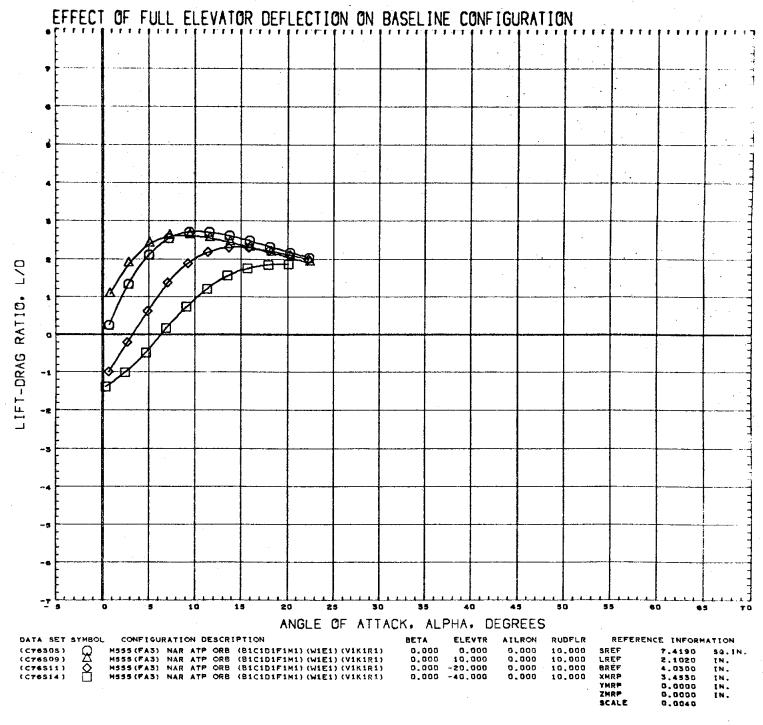


PAGE

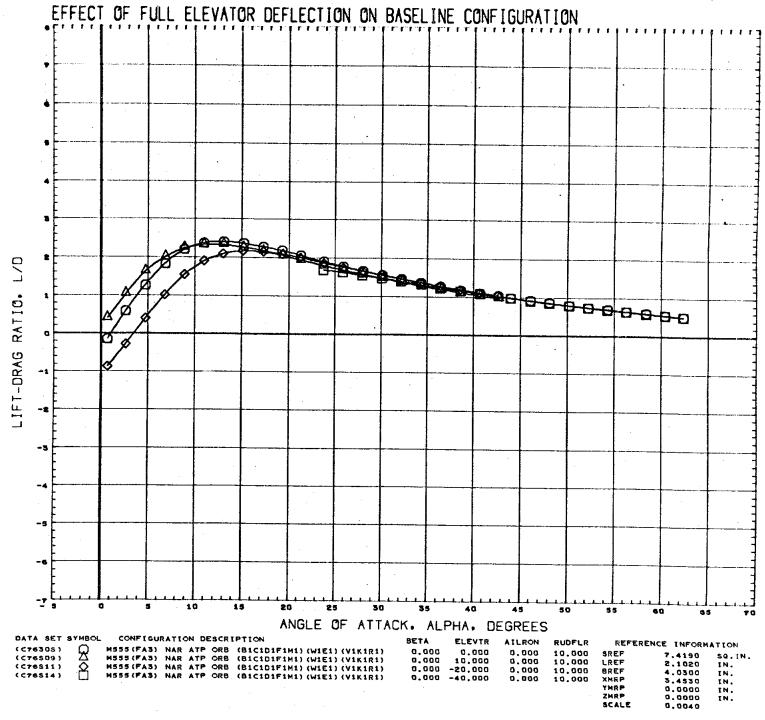


1.20

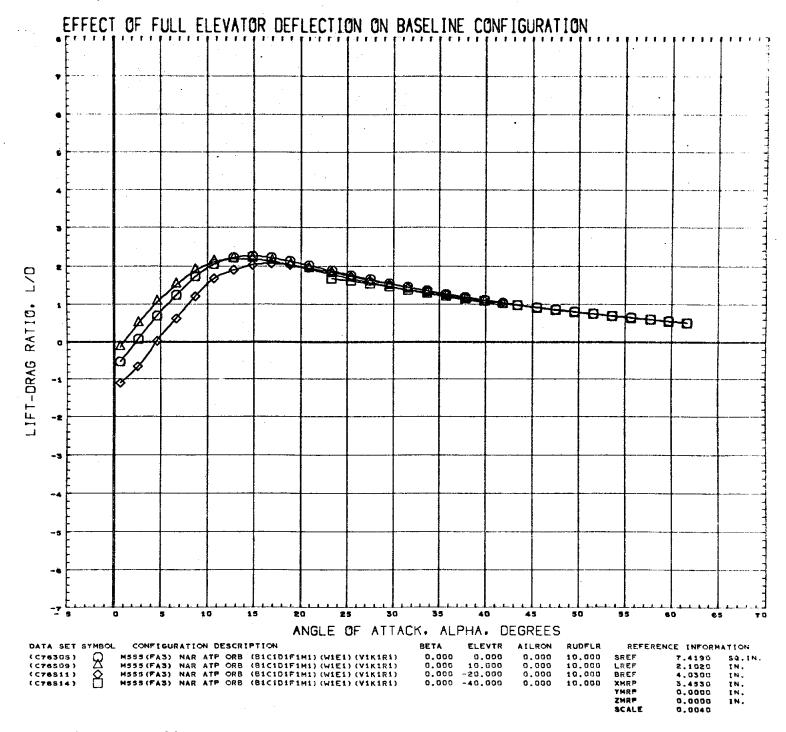
PAGE



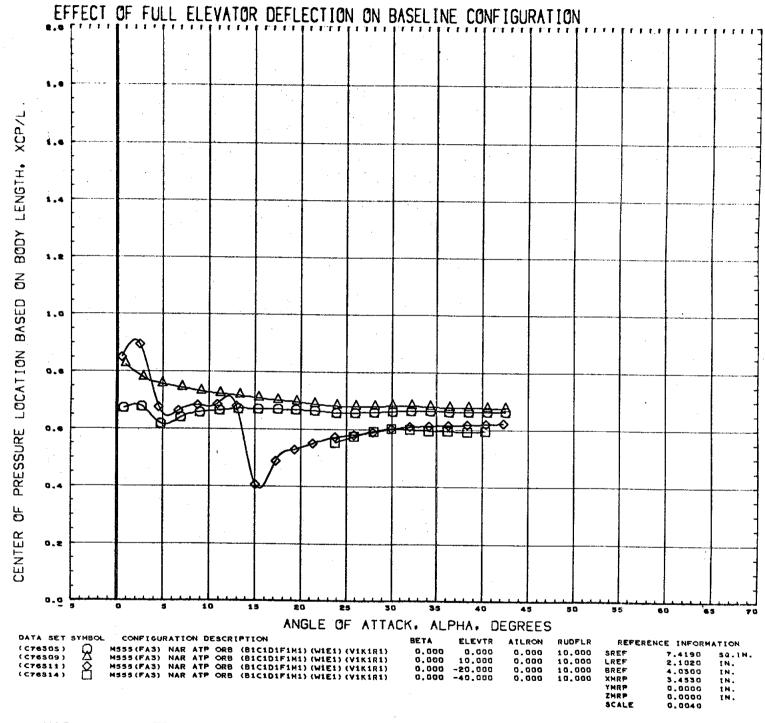
MACH 1.97



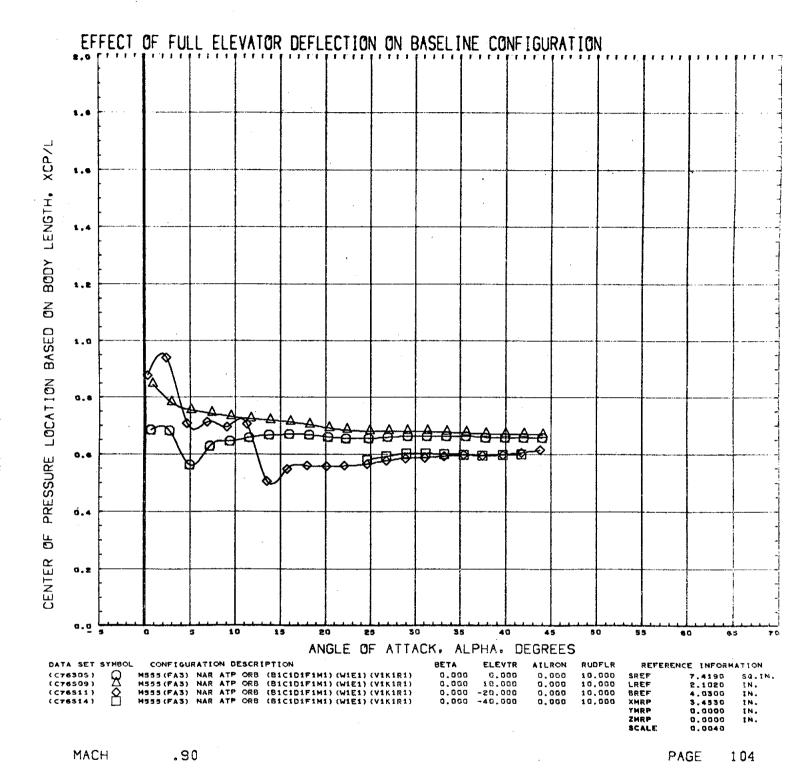
2.99

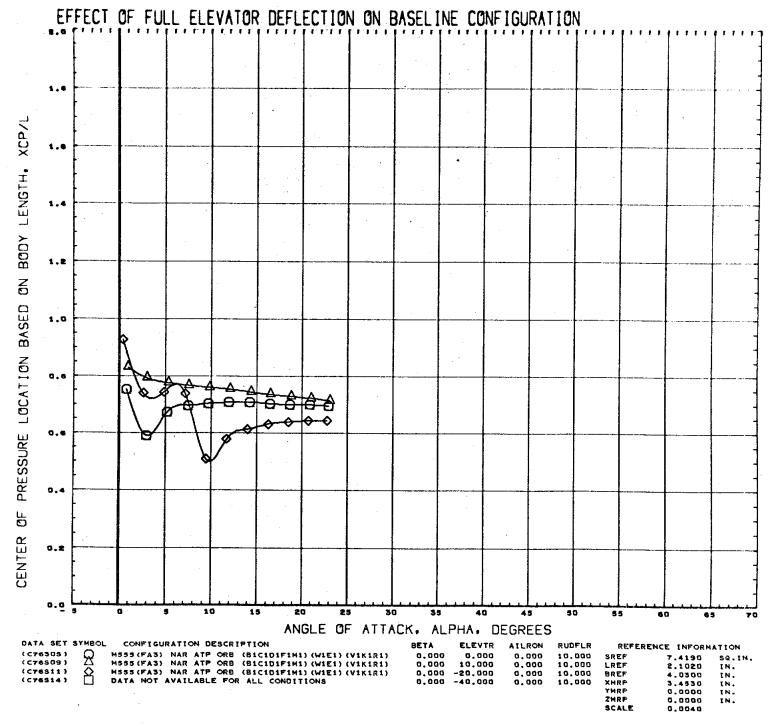


MACH 4.96

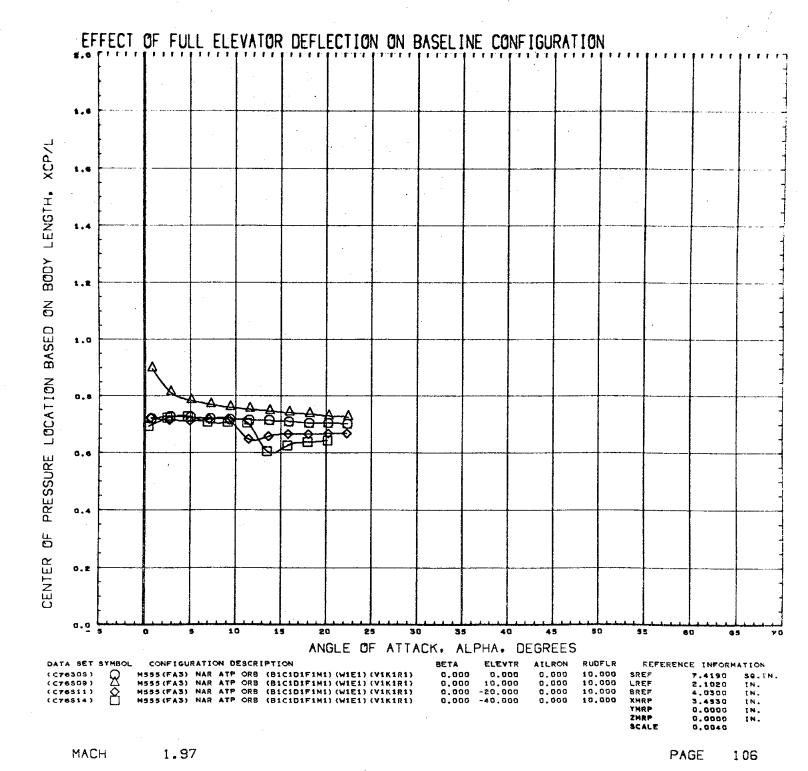


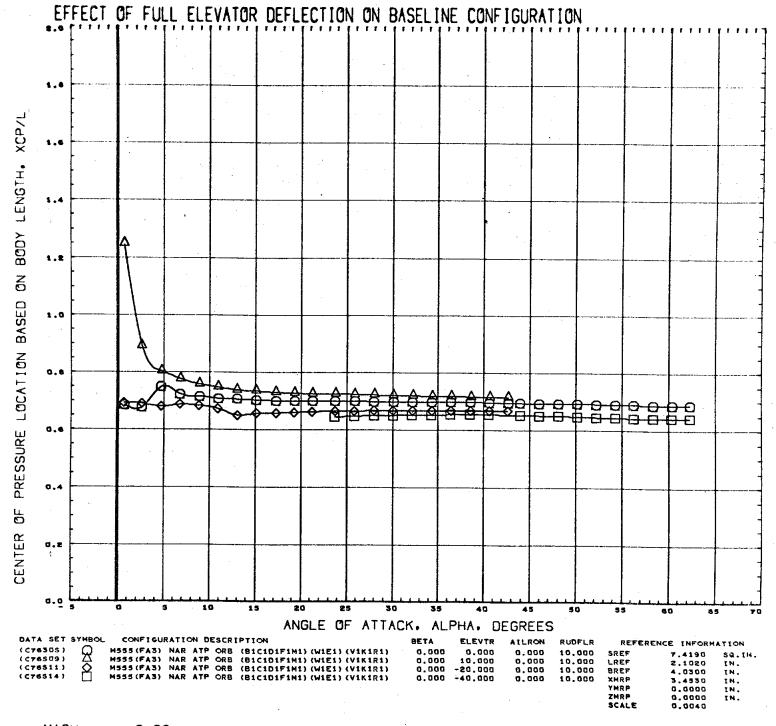
MACH .59



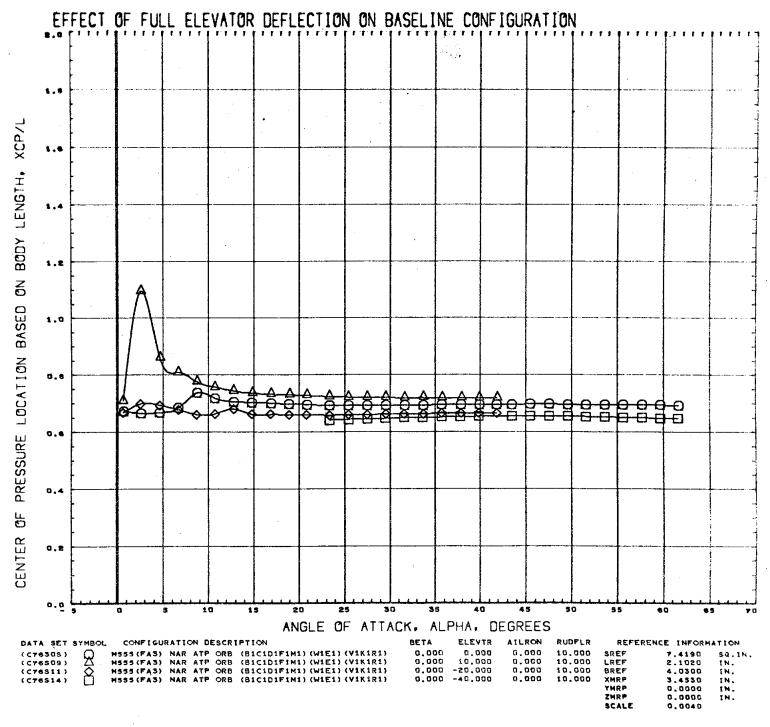


1.20

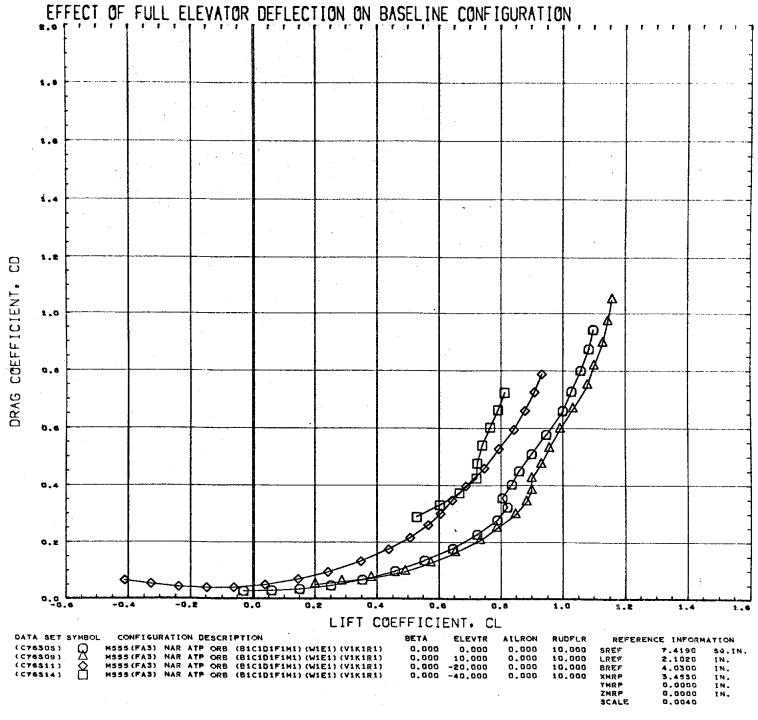




MACH 2.99

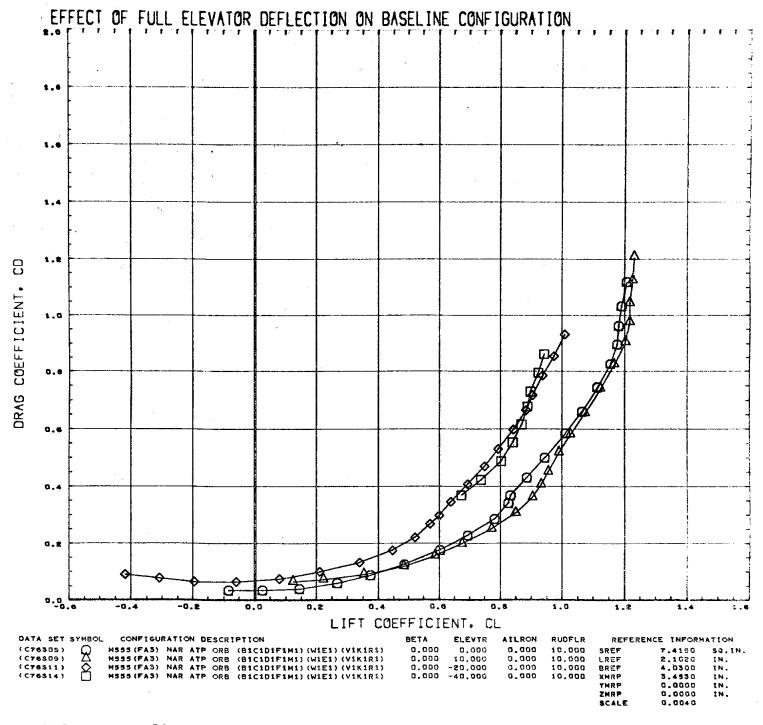


MACH 4.96

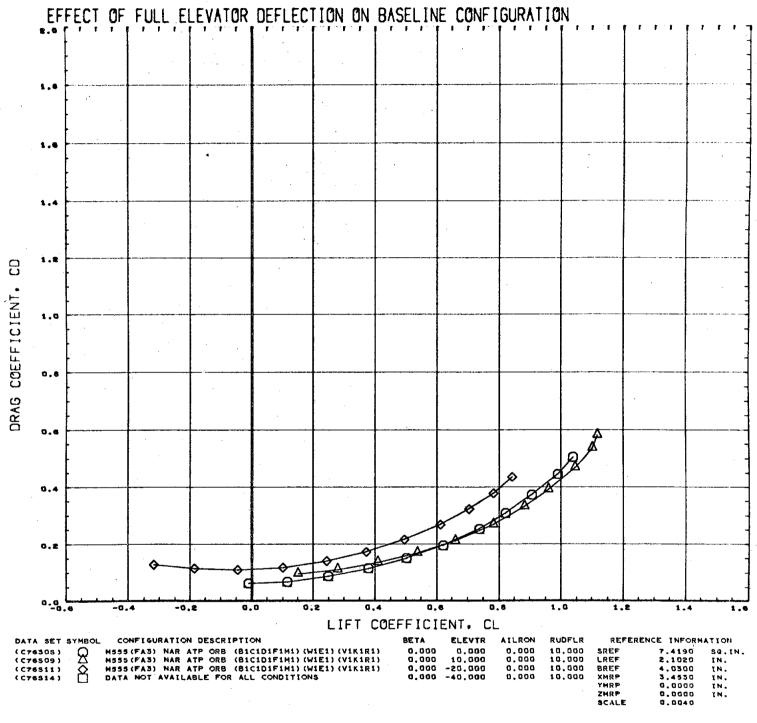


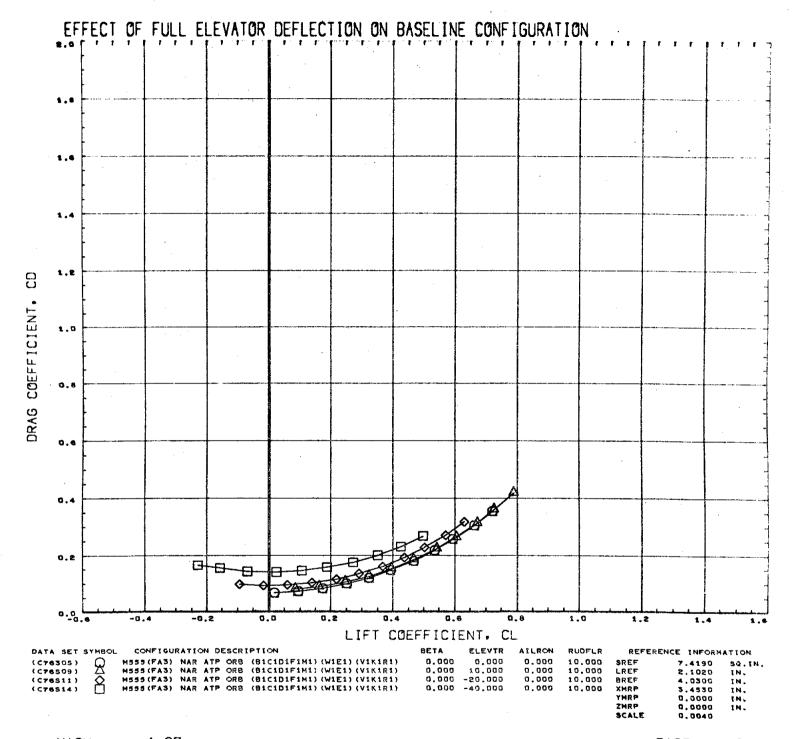
MACH .59

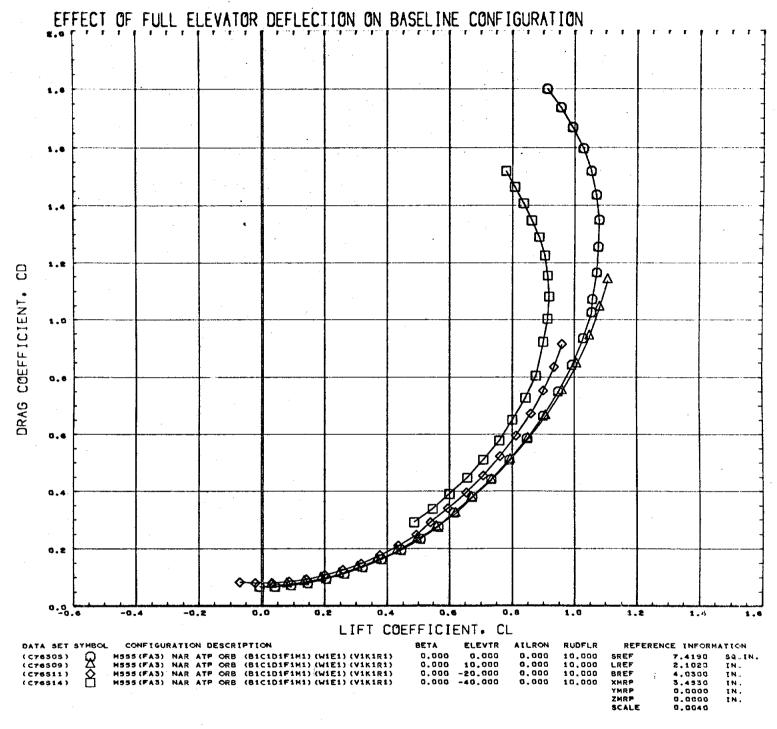
PAGE



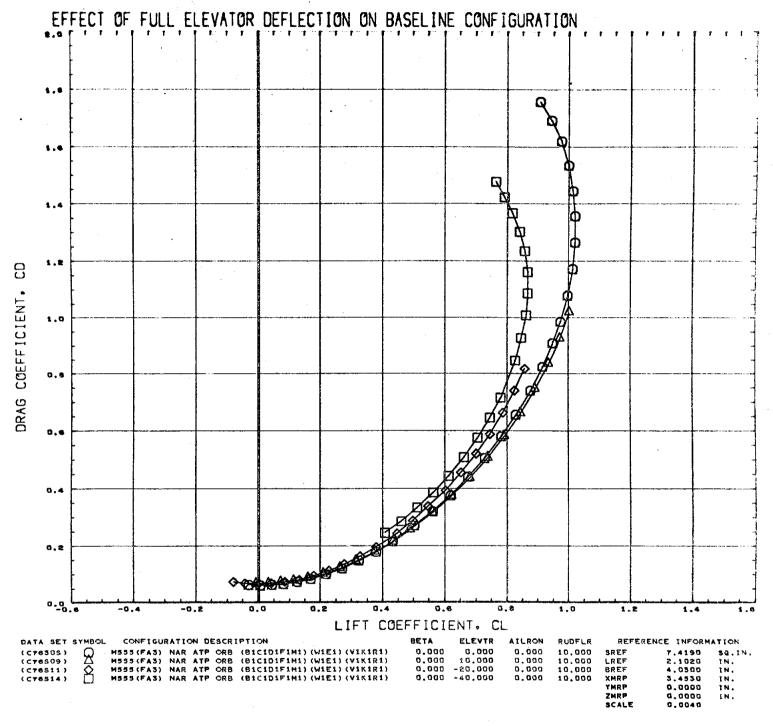
MACH .90



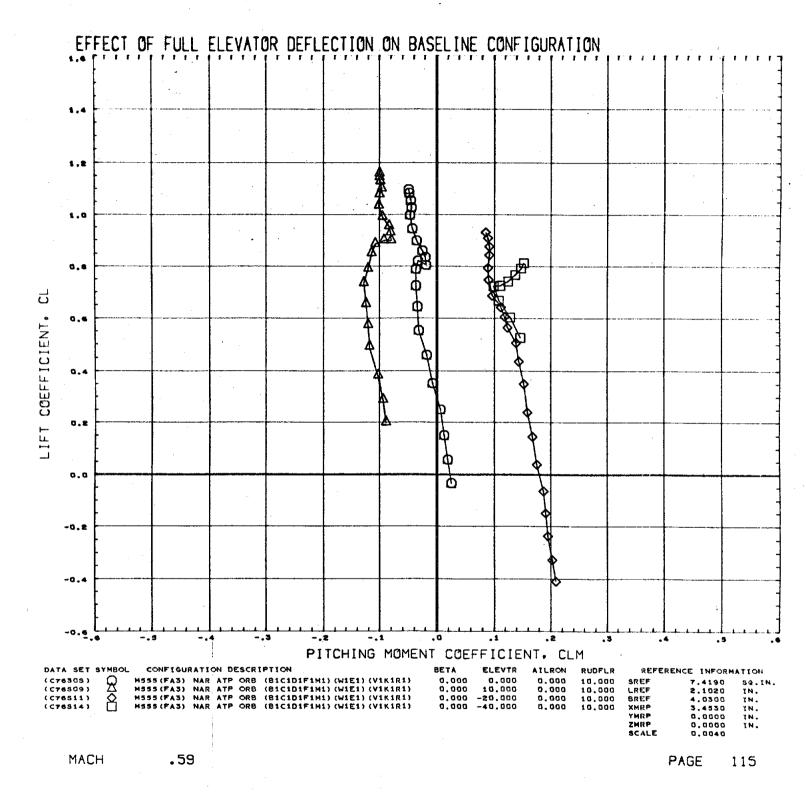


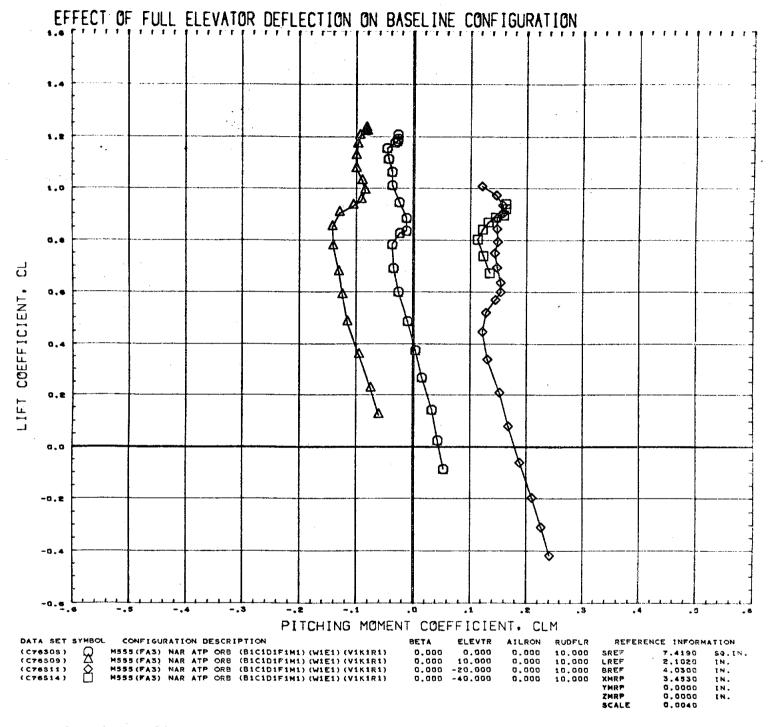


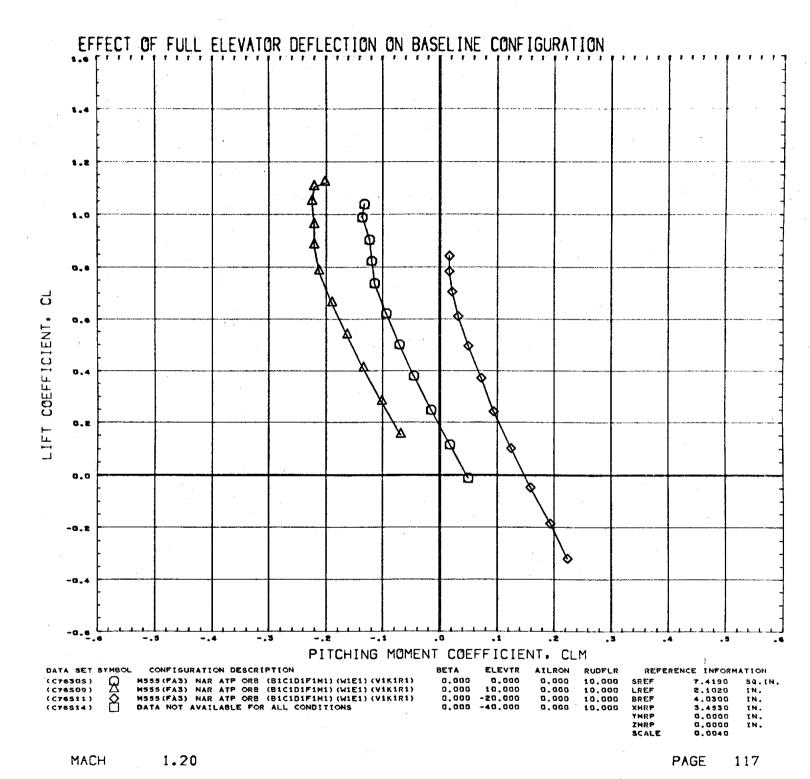
MACH 2.99

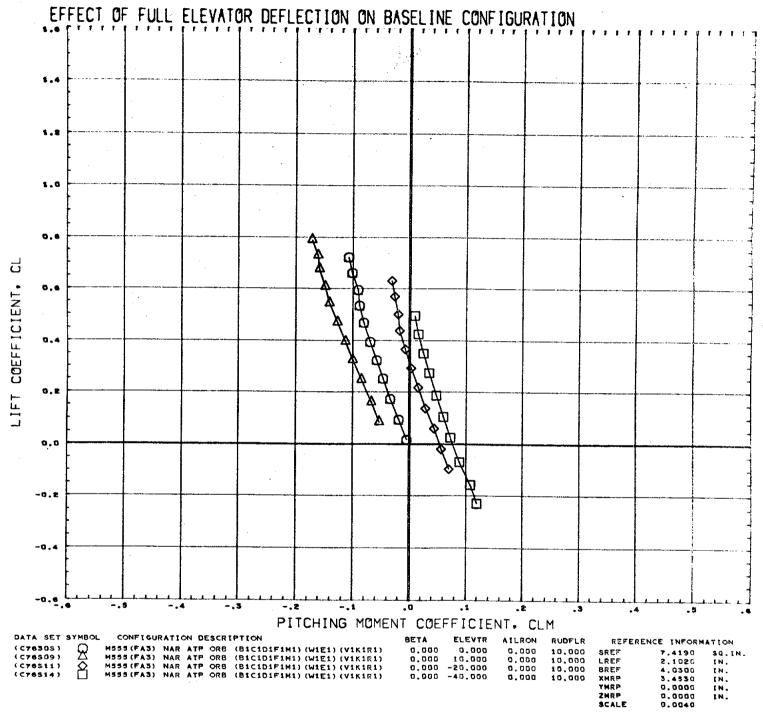


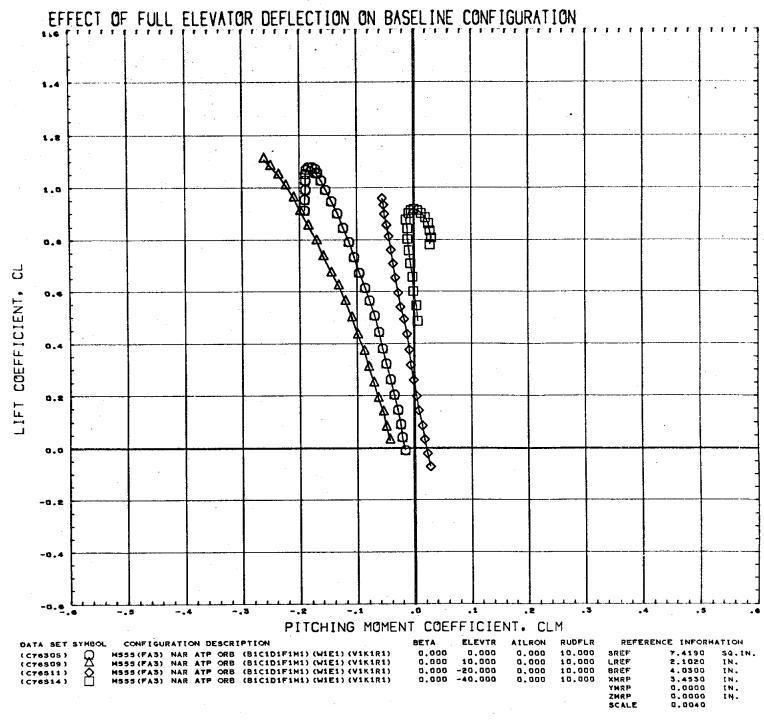
MACH 4.96





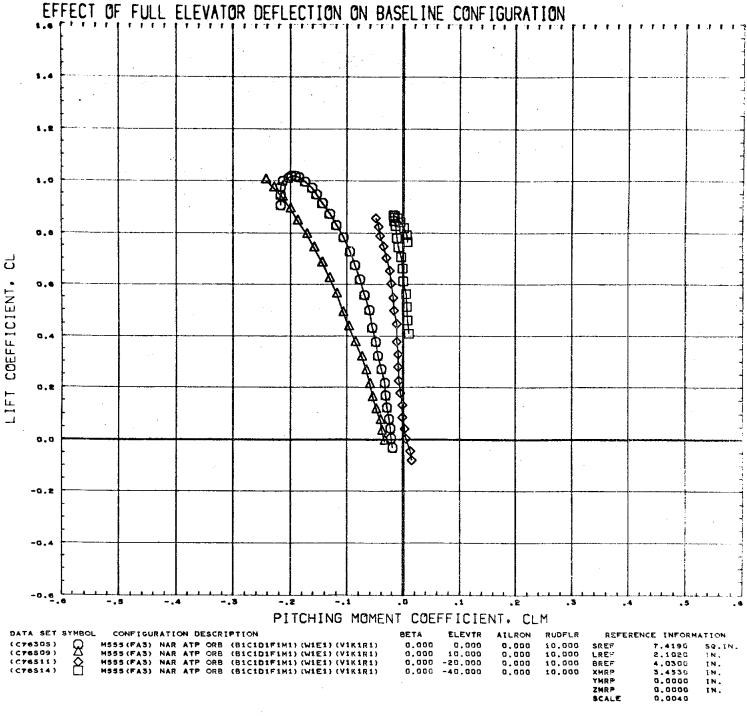






2.99

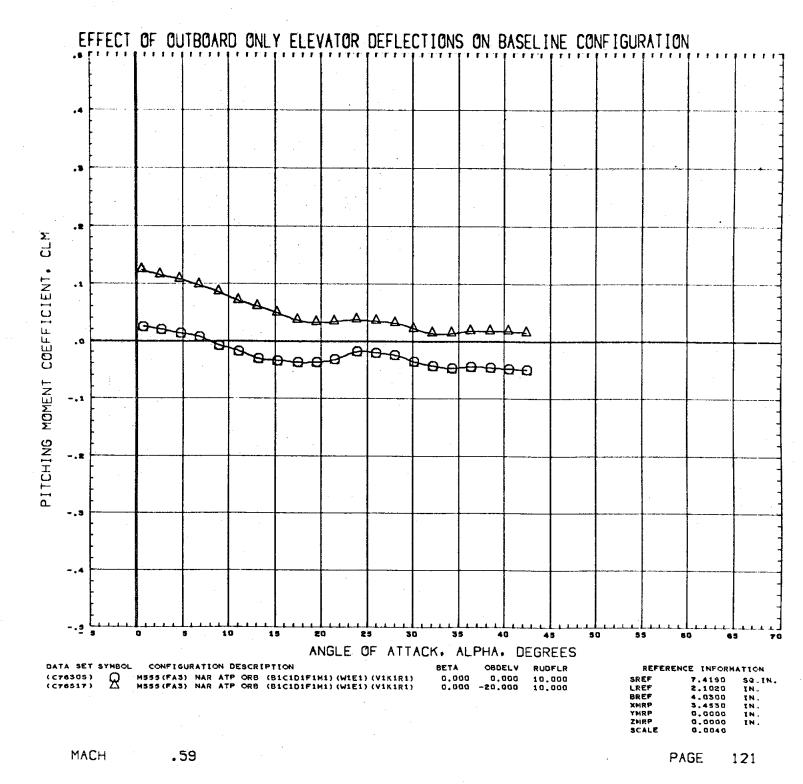
MACH

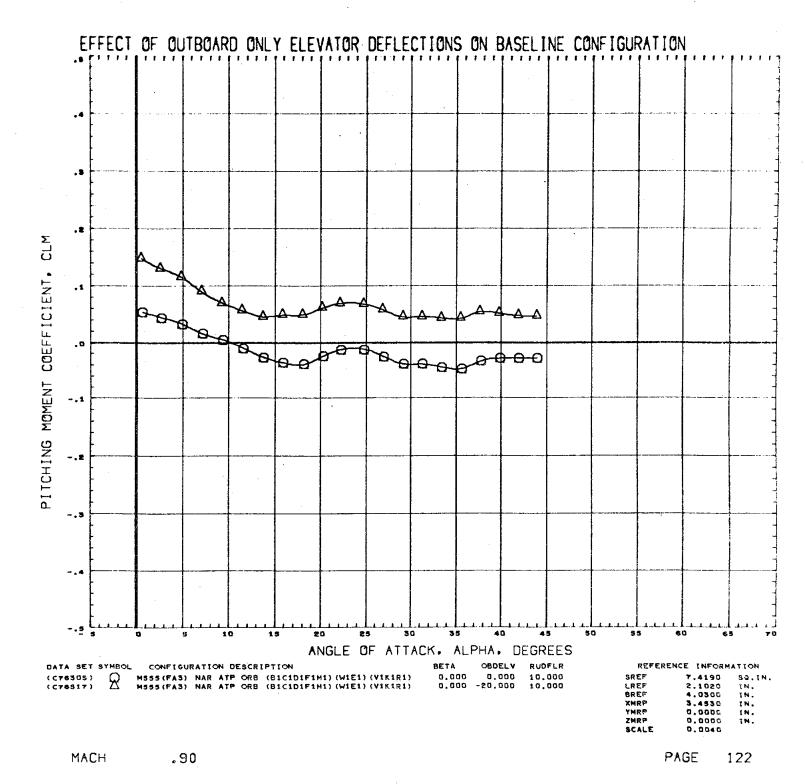


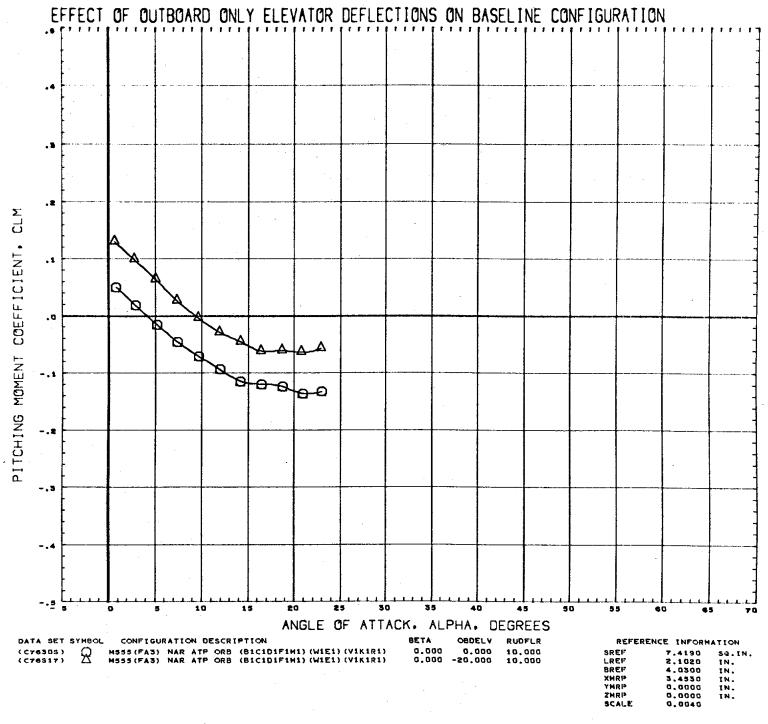
4.96

PAGE

120



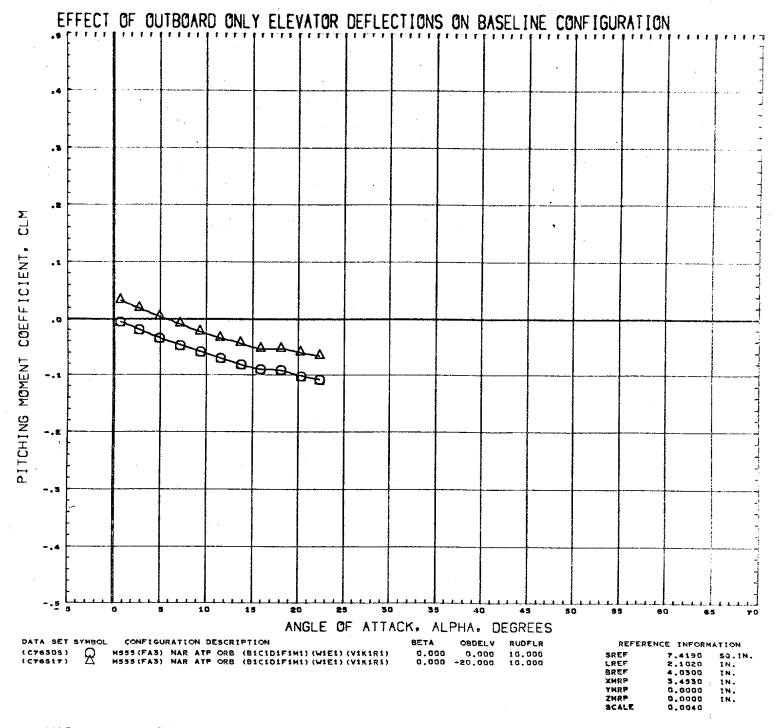


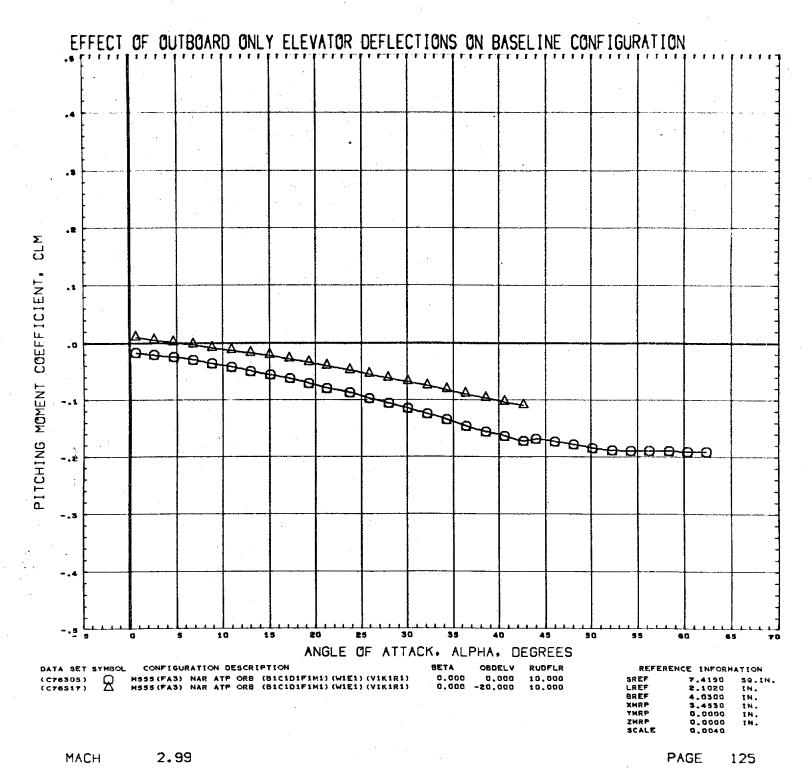


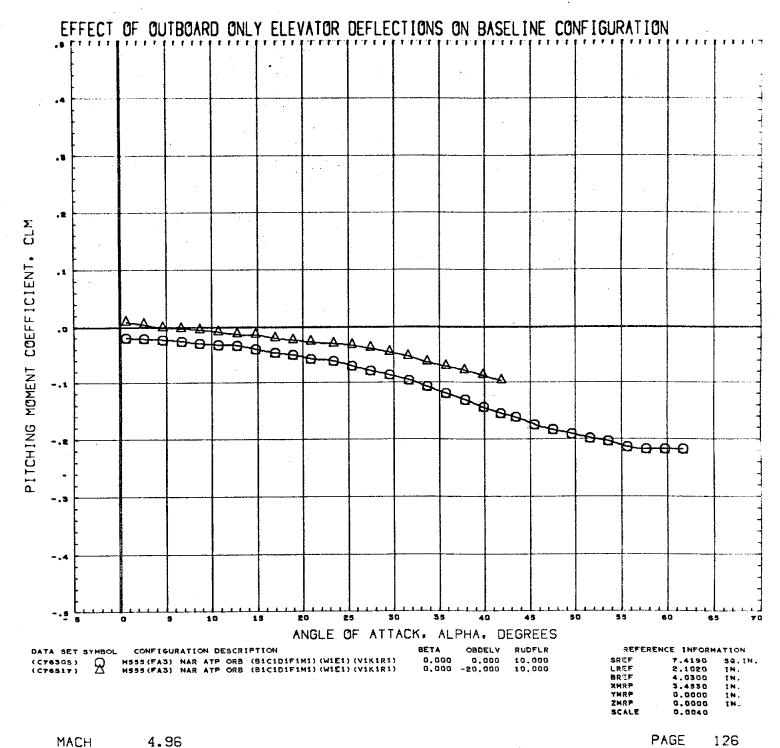
1.20

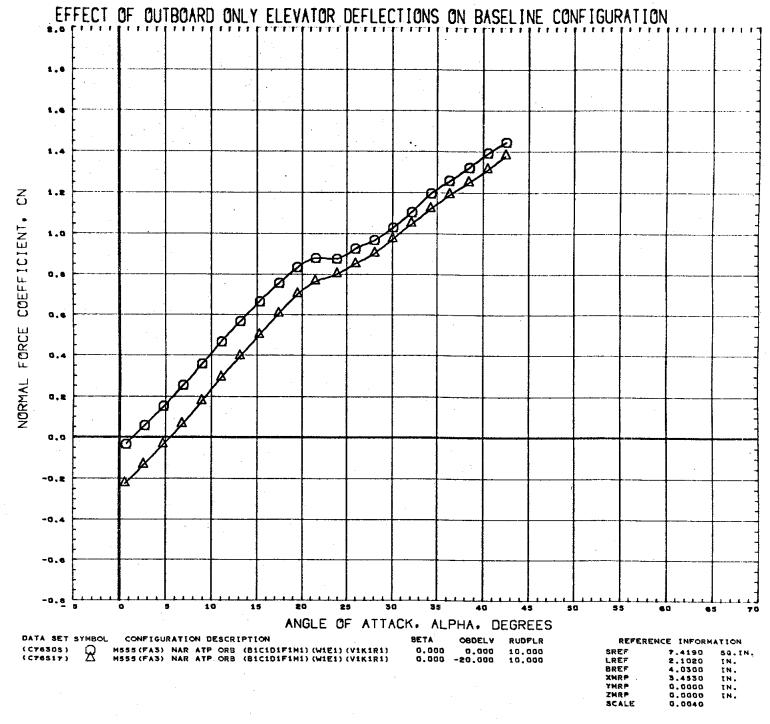
PAGE

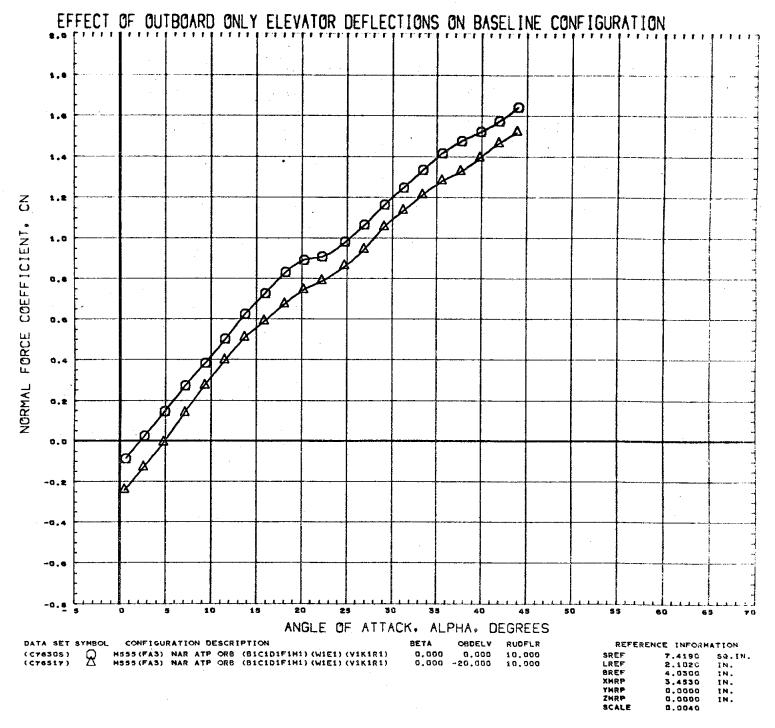
123

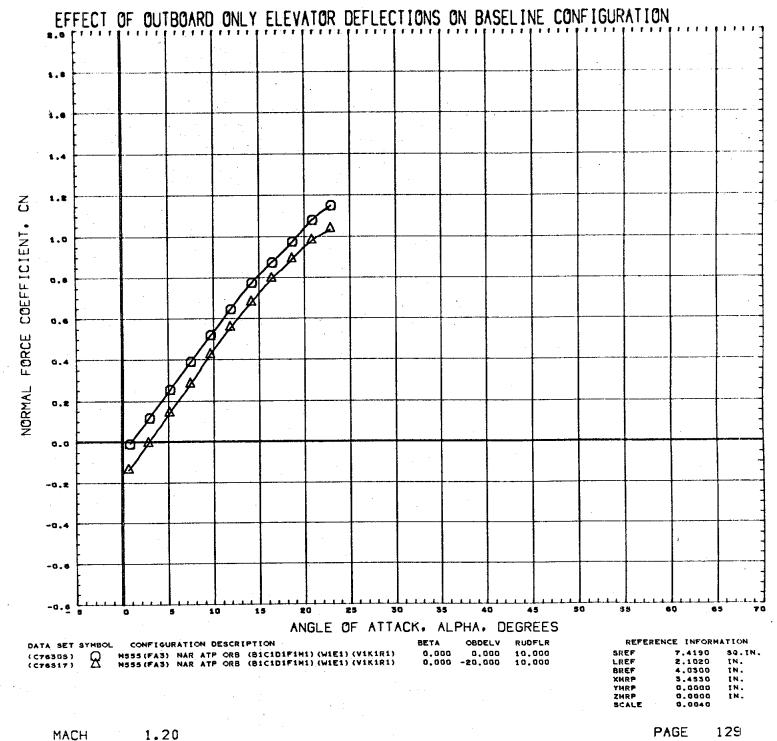


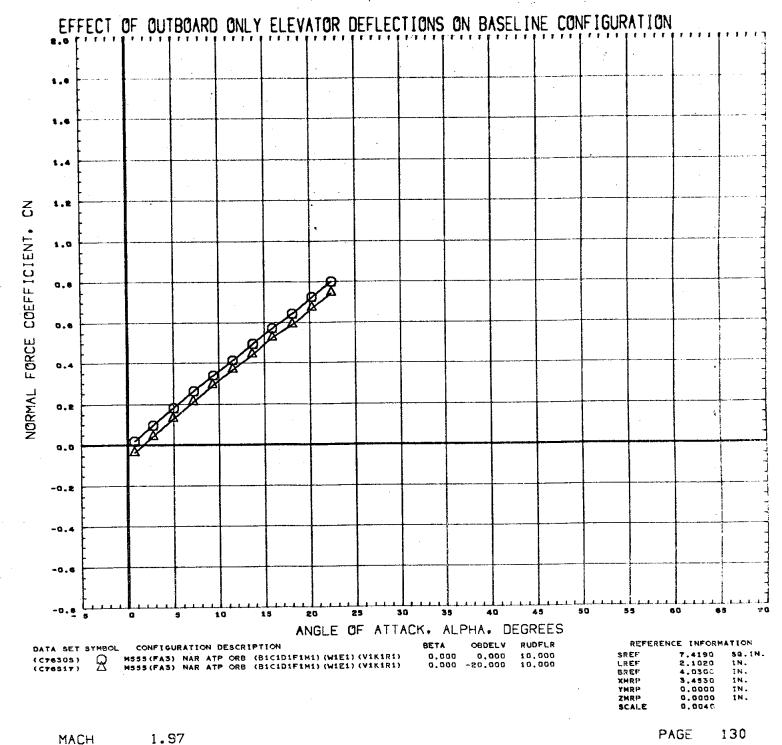


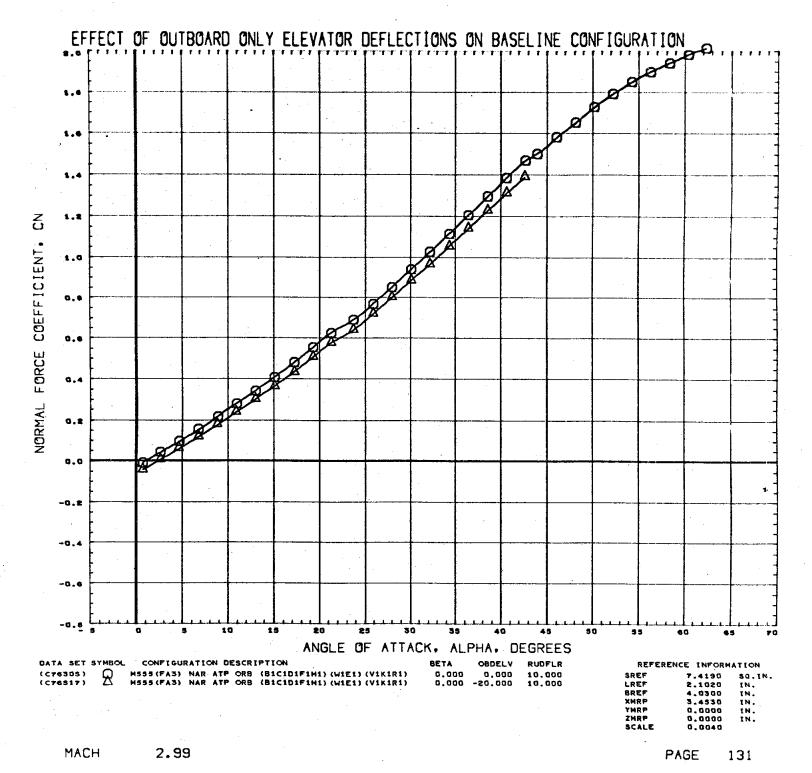


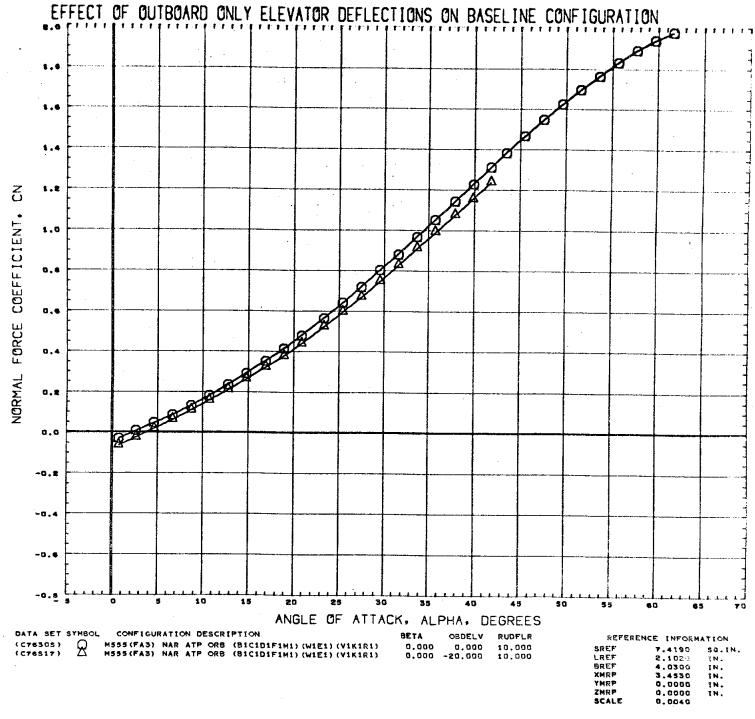




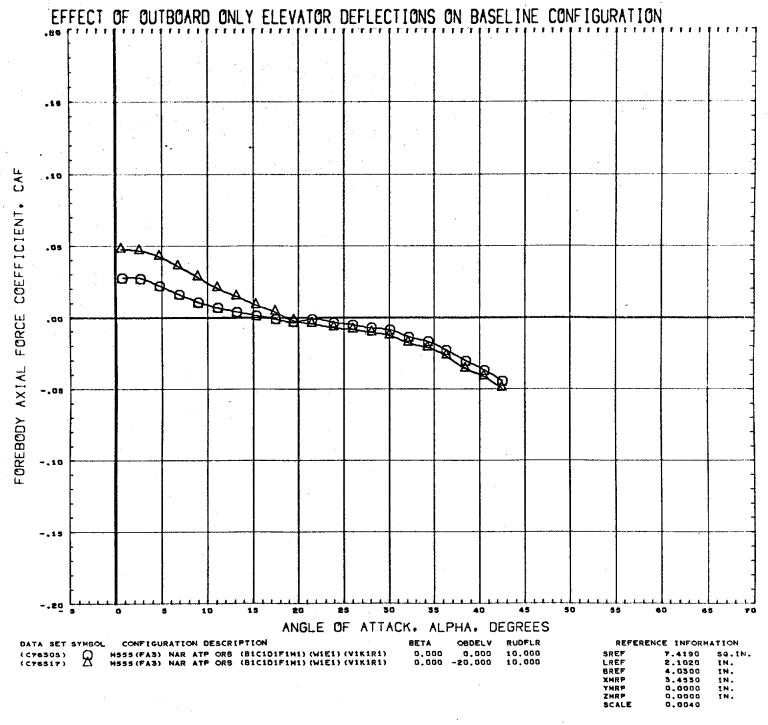




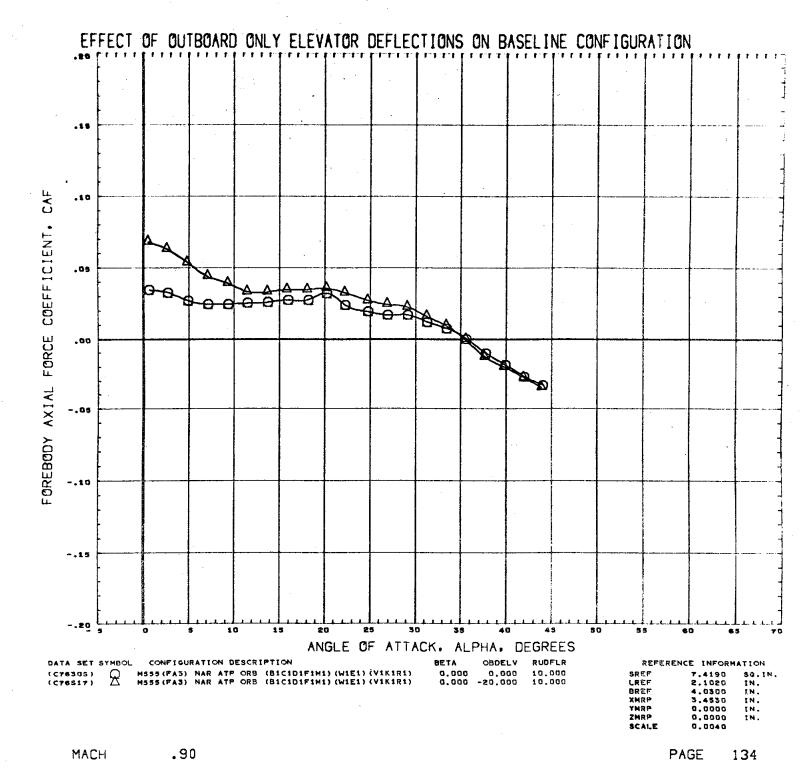


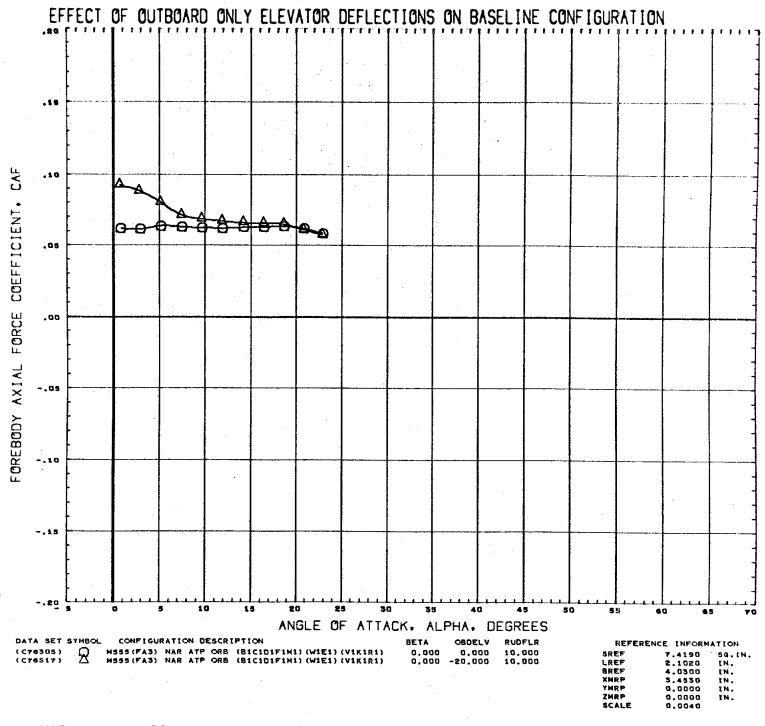


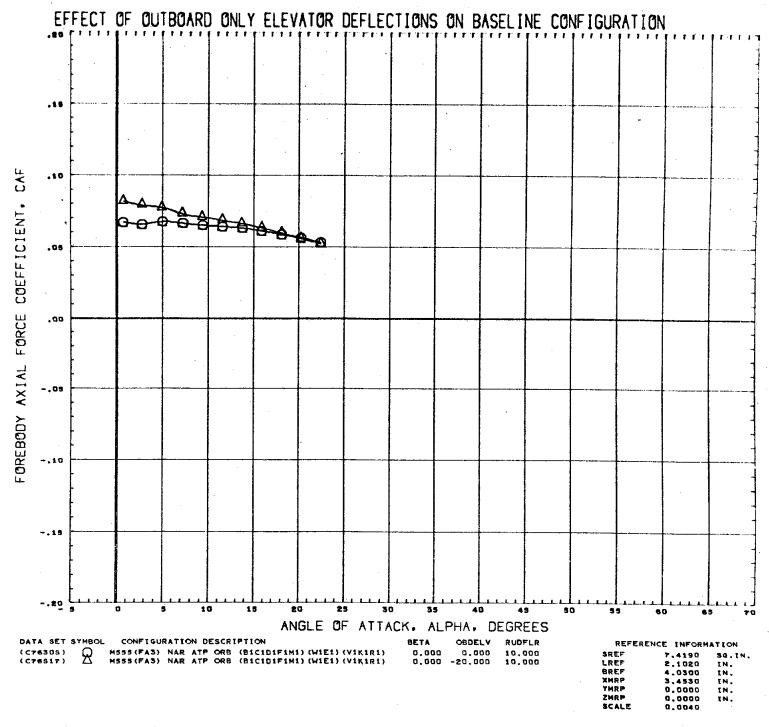
MACH 4.96

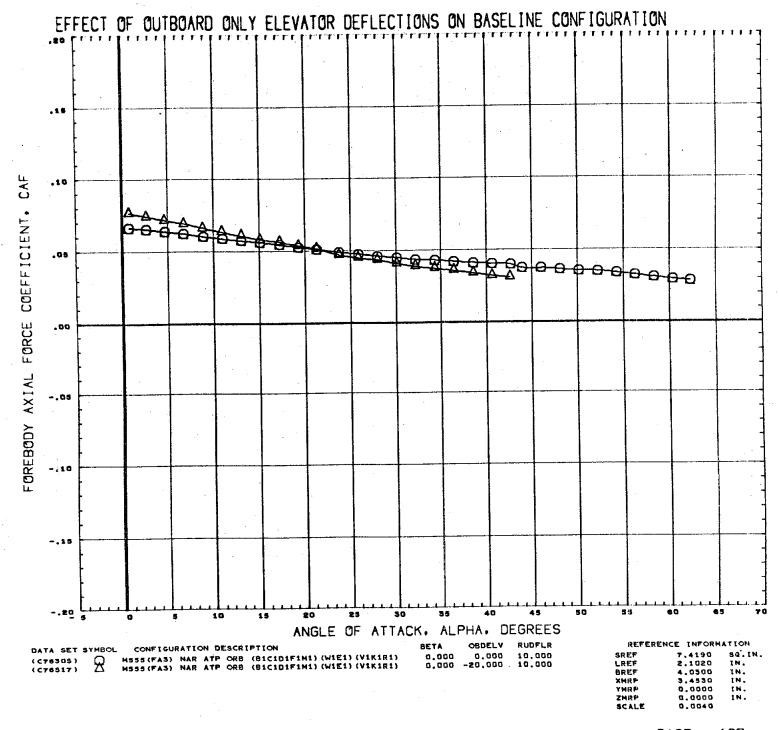


.59



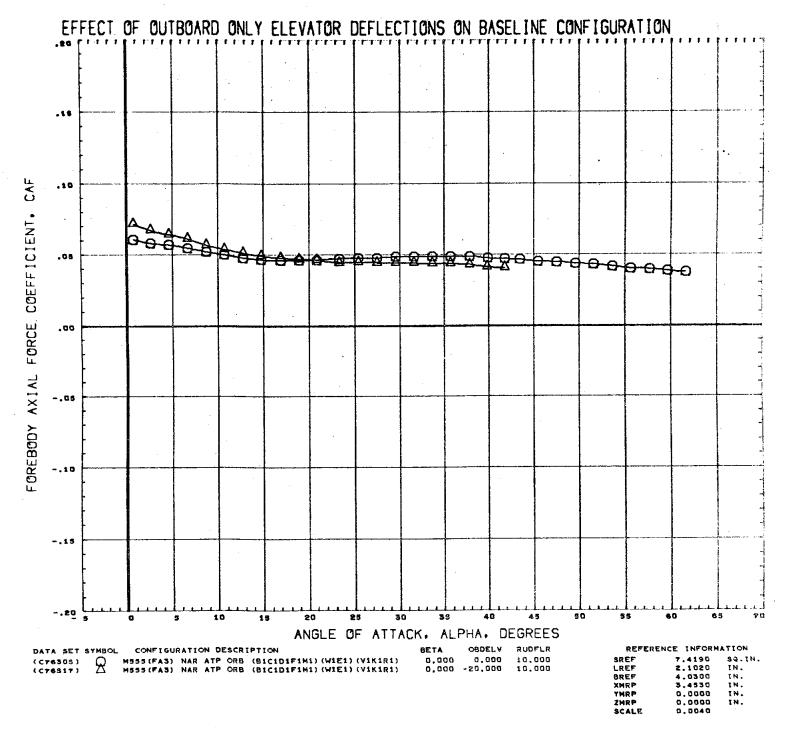




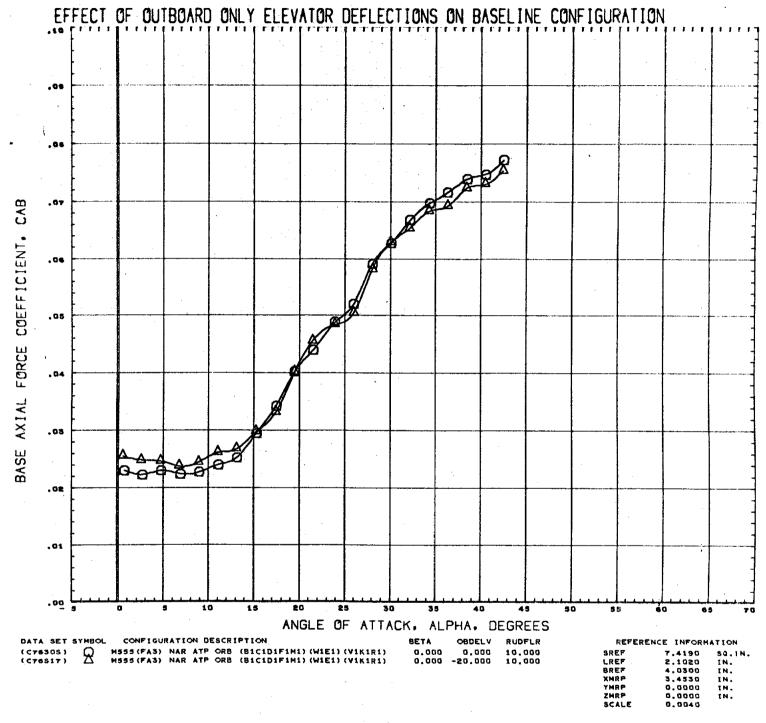


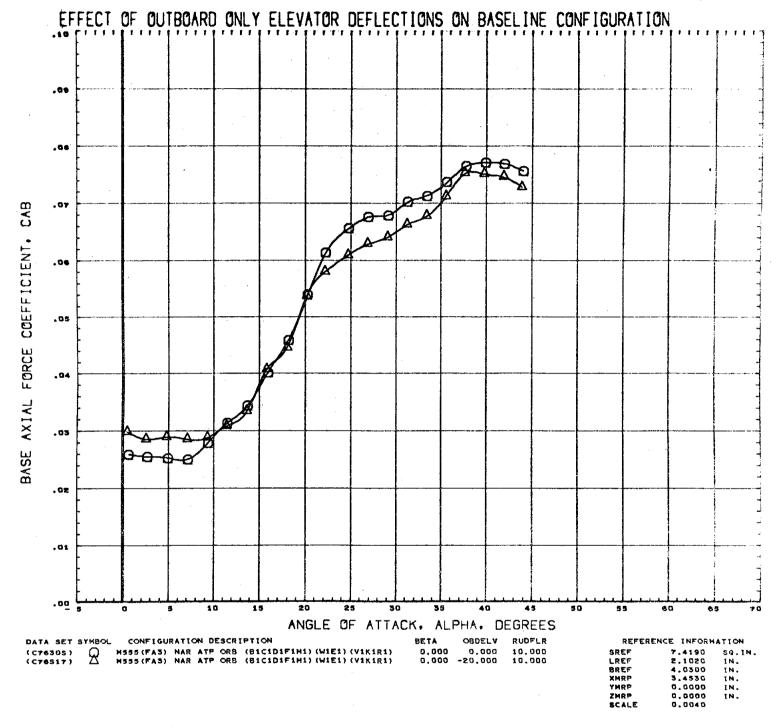
PAGE 137

MACH 2.99



4.96

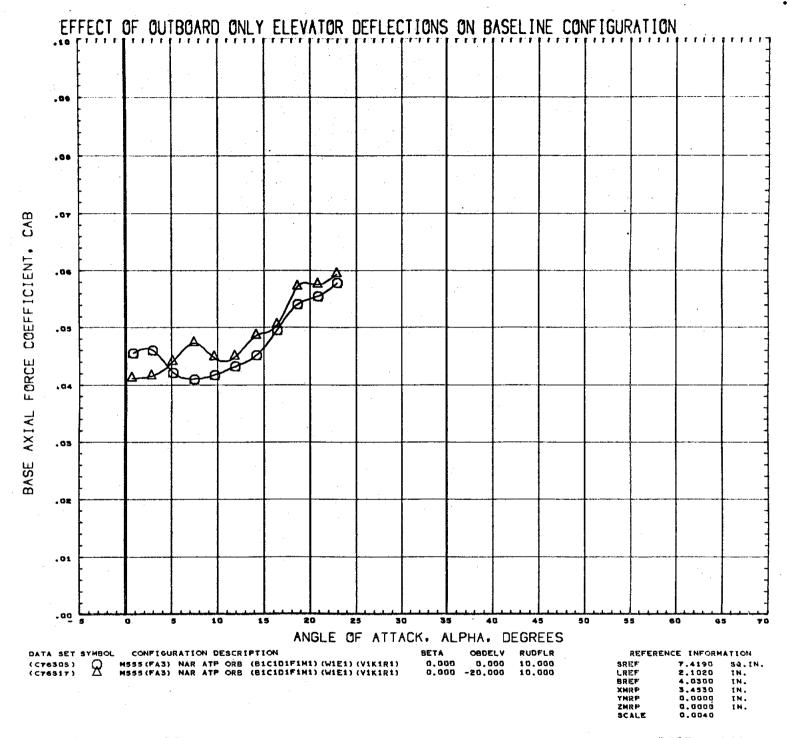


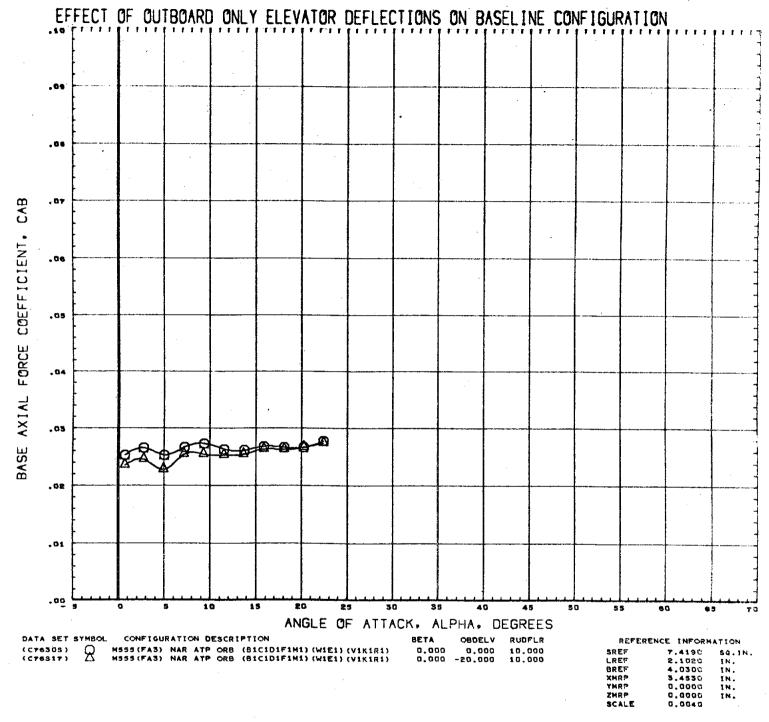


.90

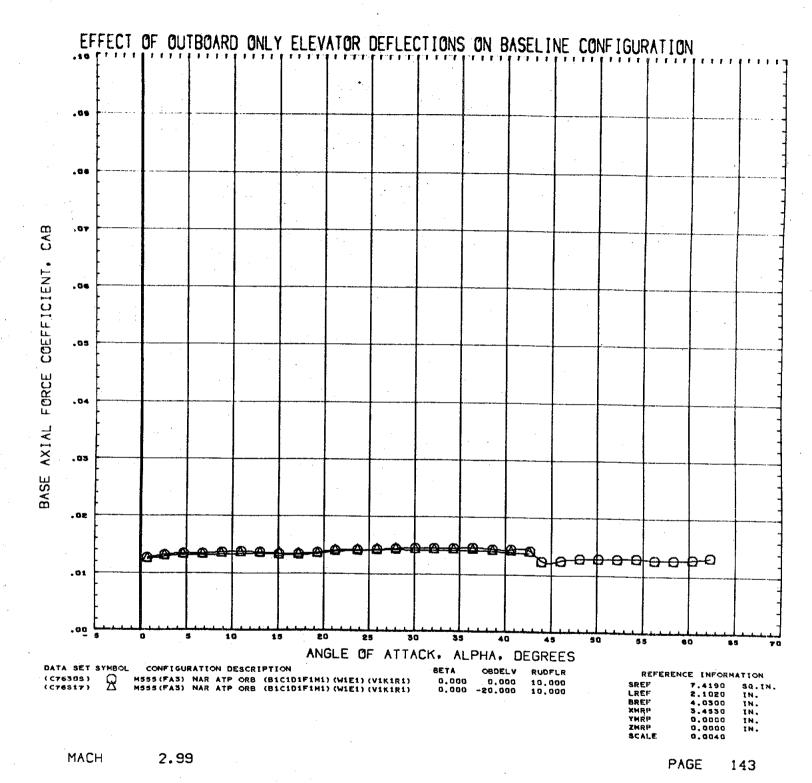
PAGE

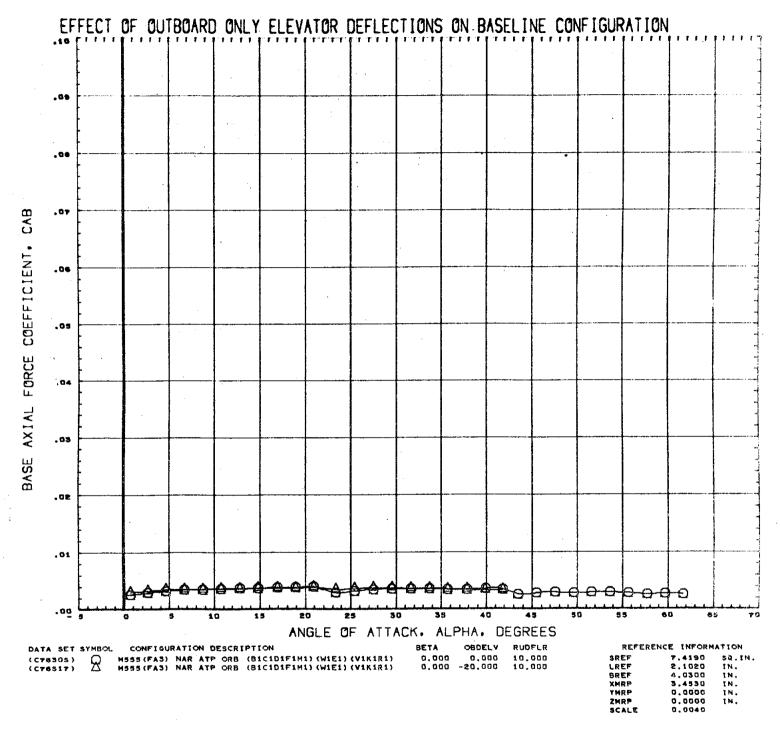
140



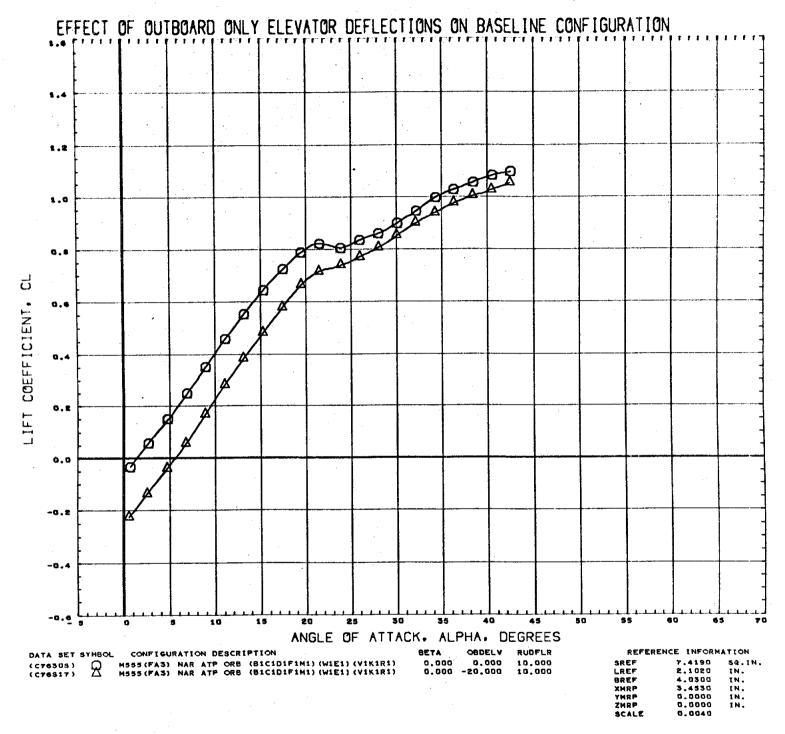


1.97



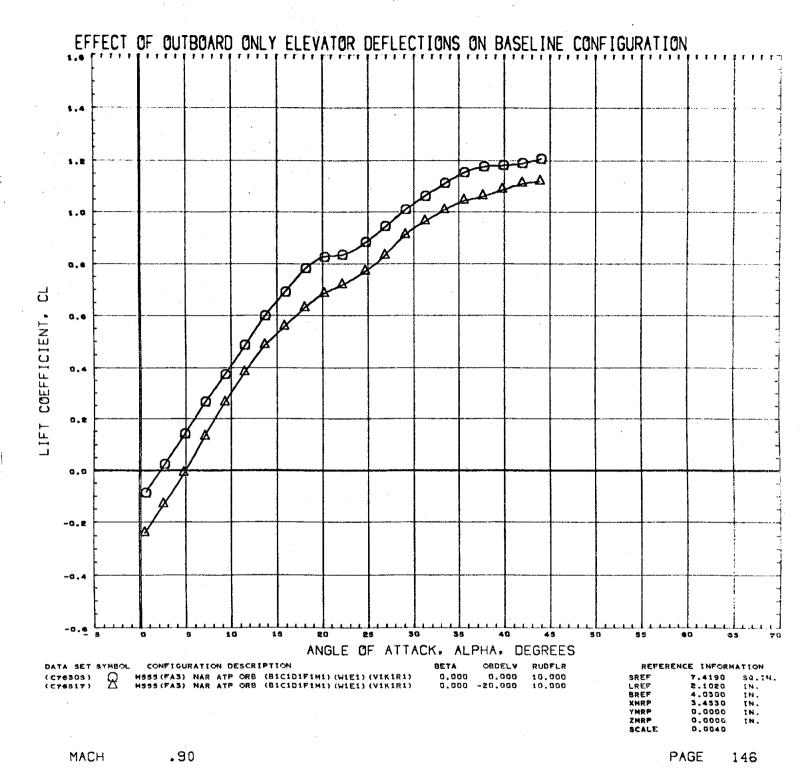


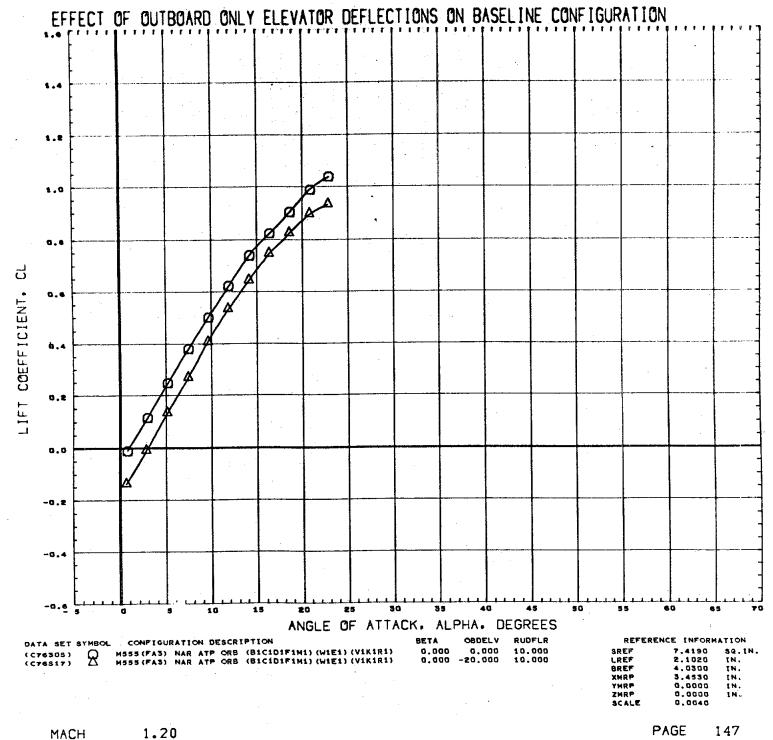
MACH 4.96

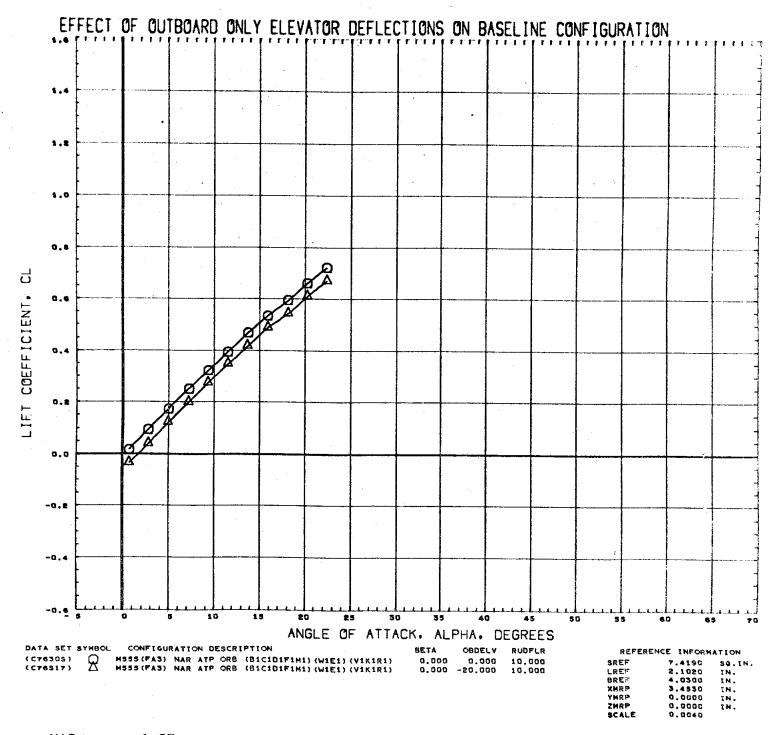


.59

MACH

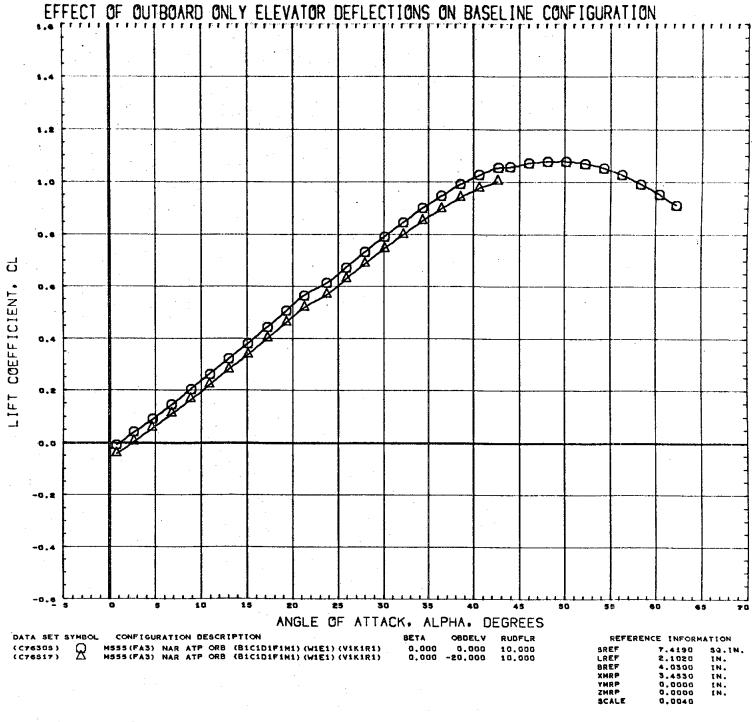


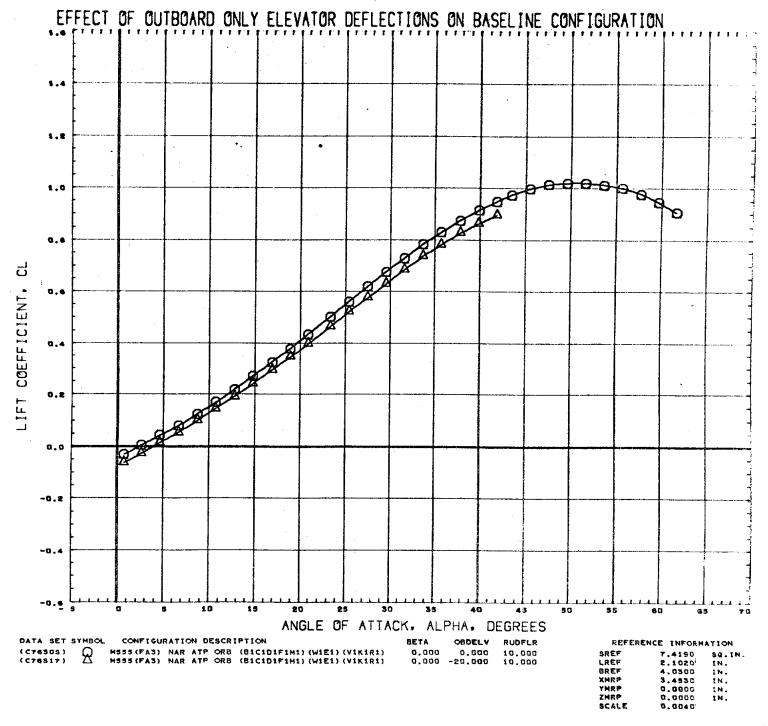




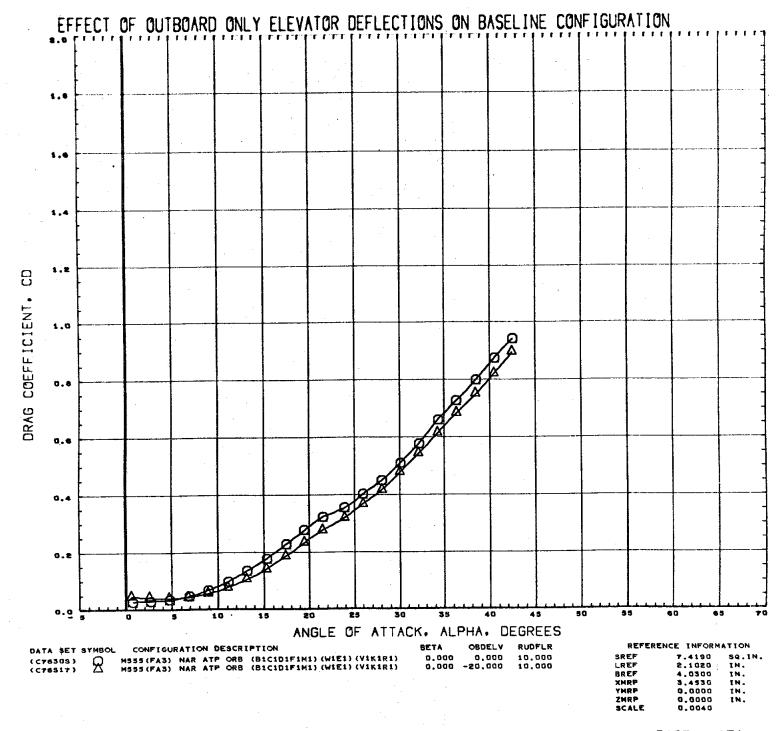
1.97

PAGE



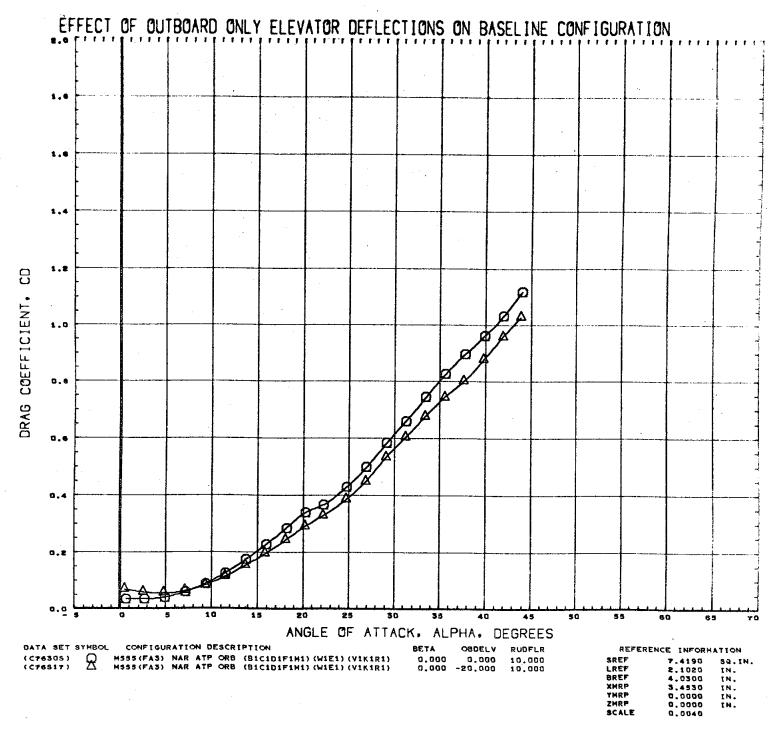


4.96



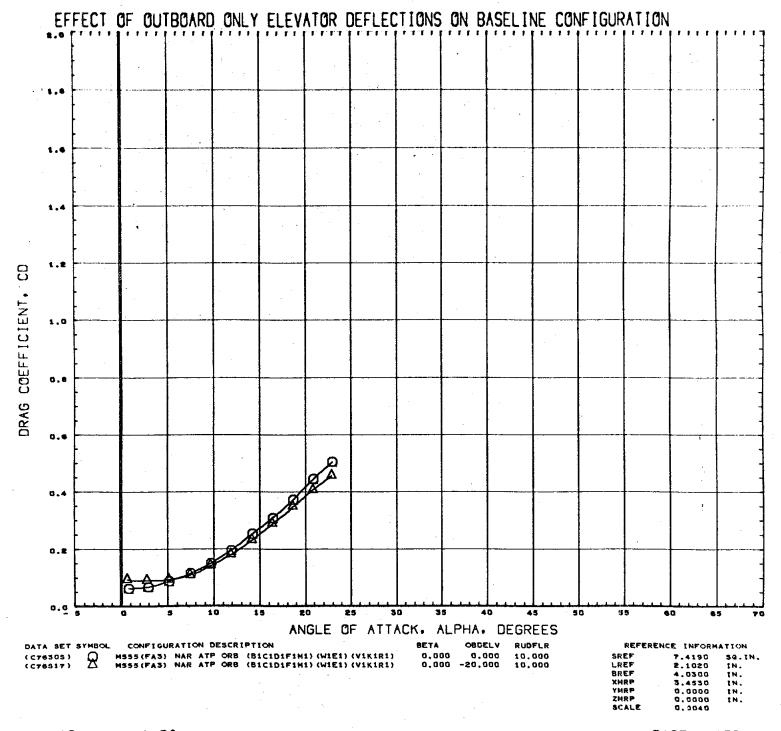
.59

MACH



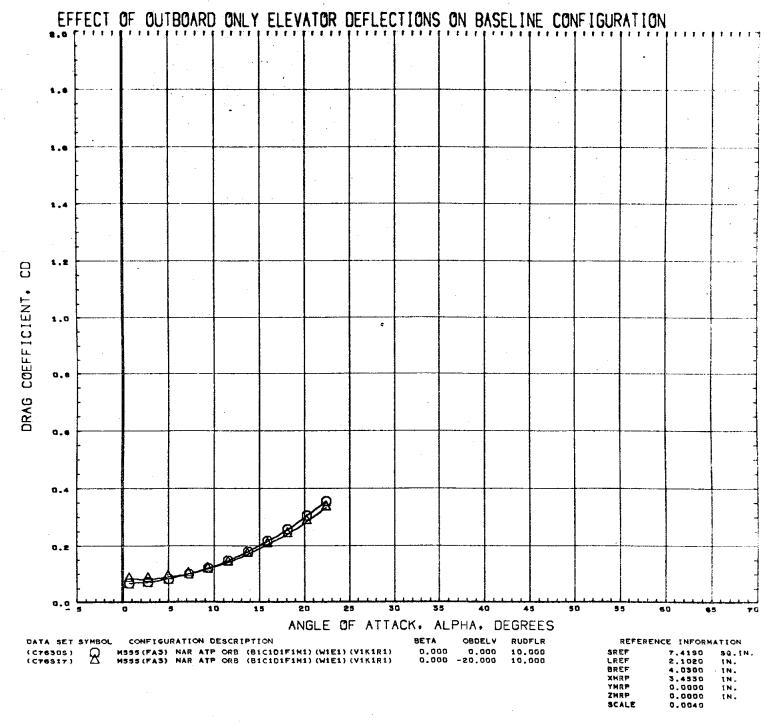
.90

PAGE

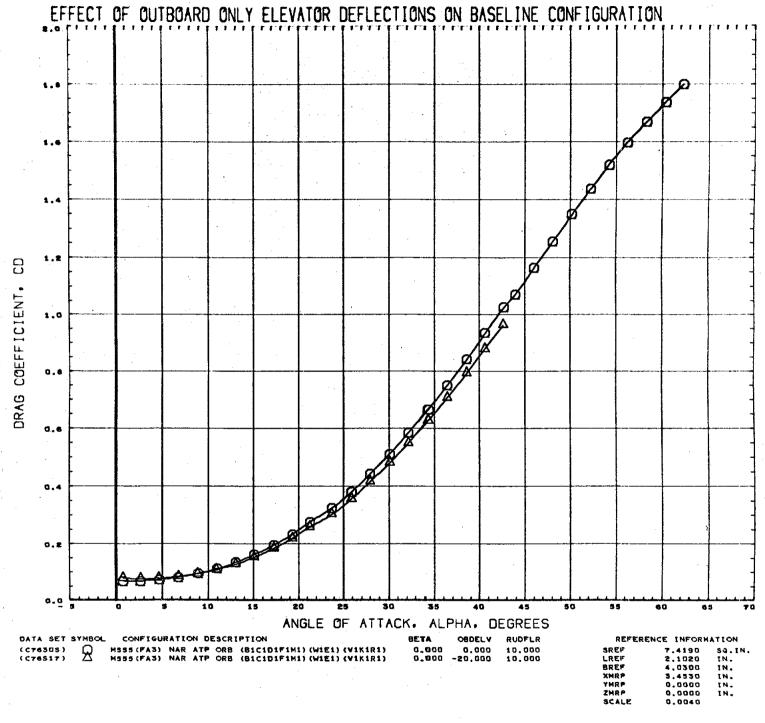


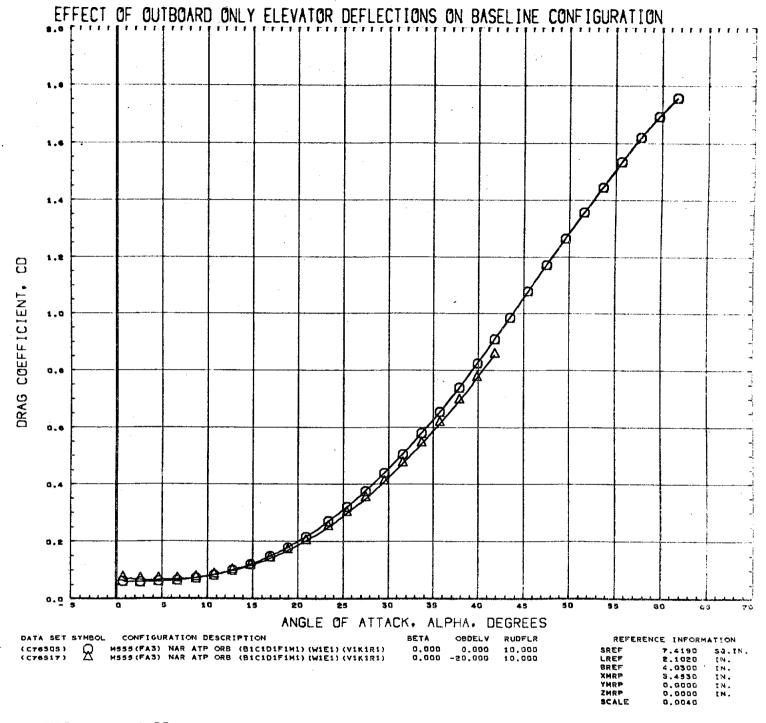
1.20

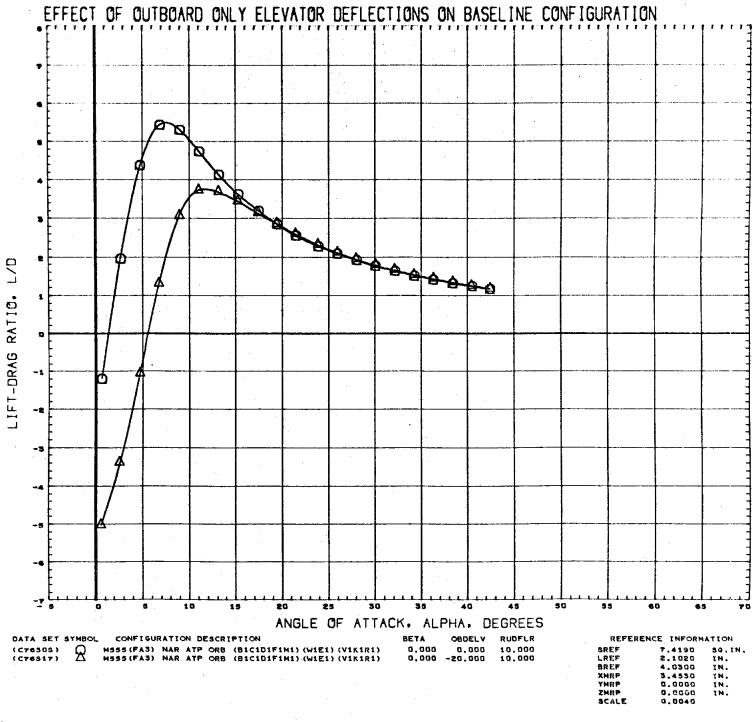
PAGE

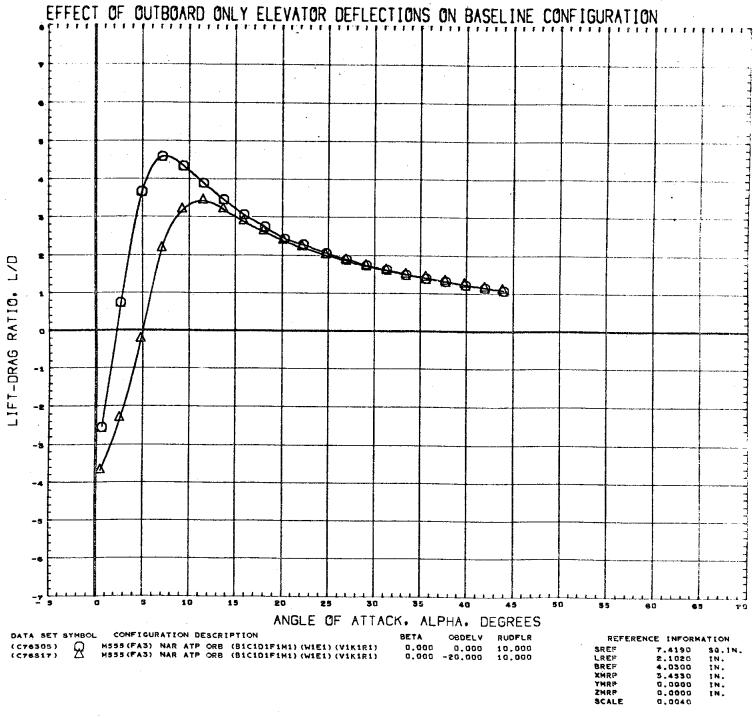


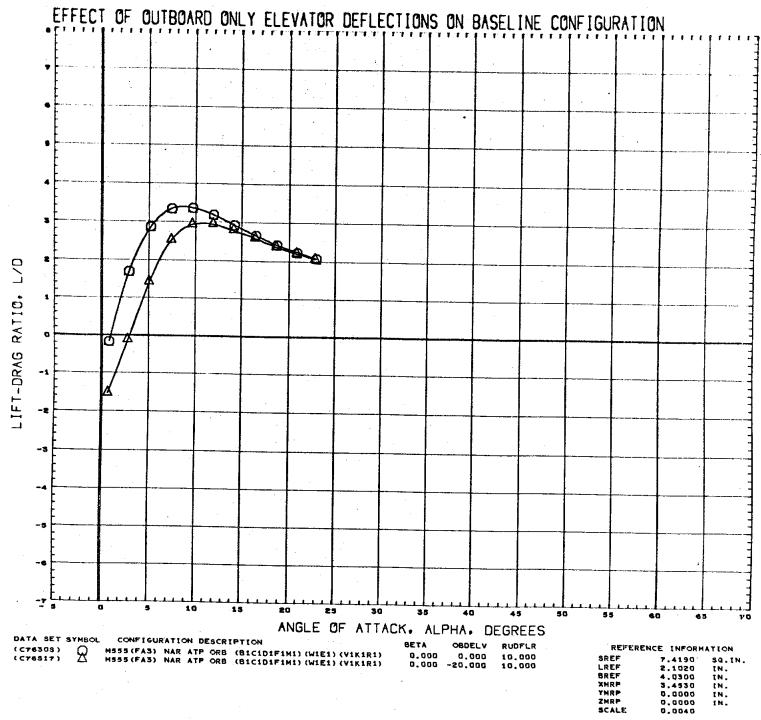
1.97



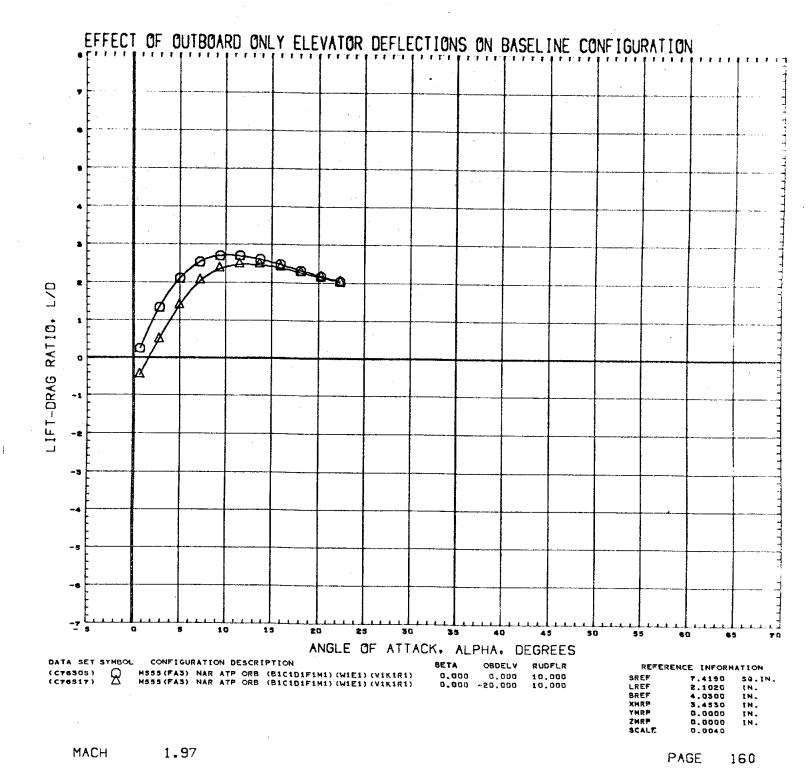


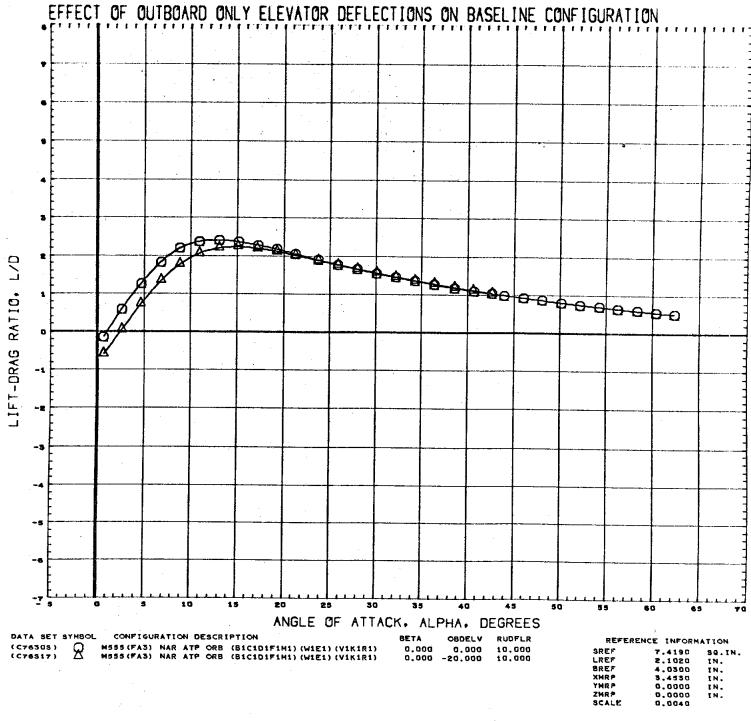


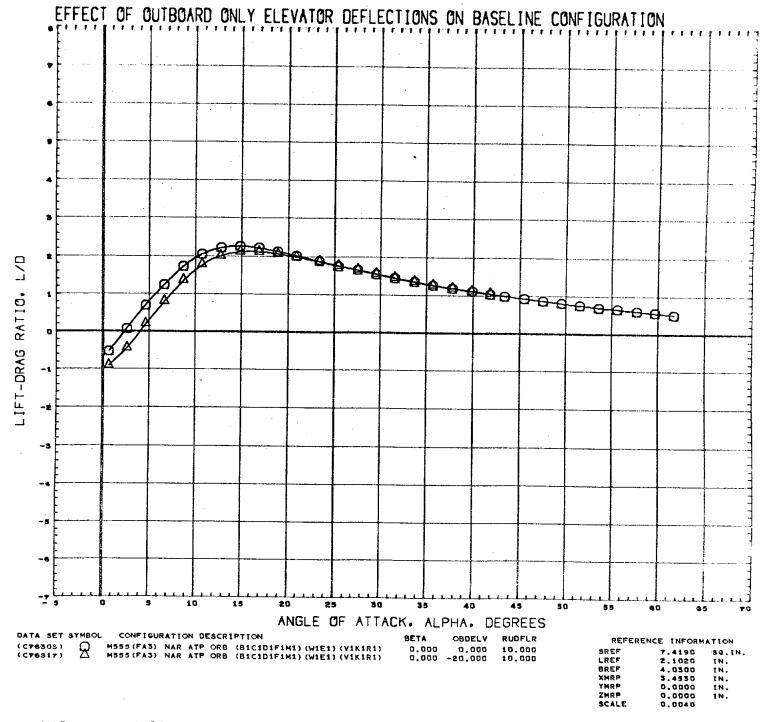


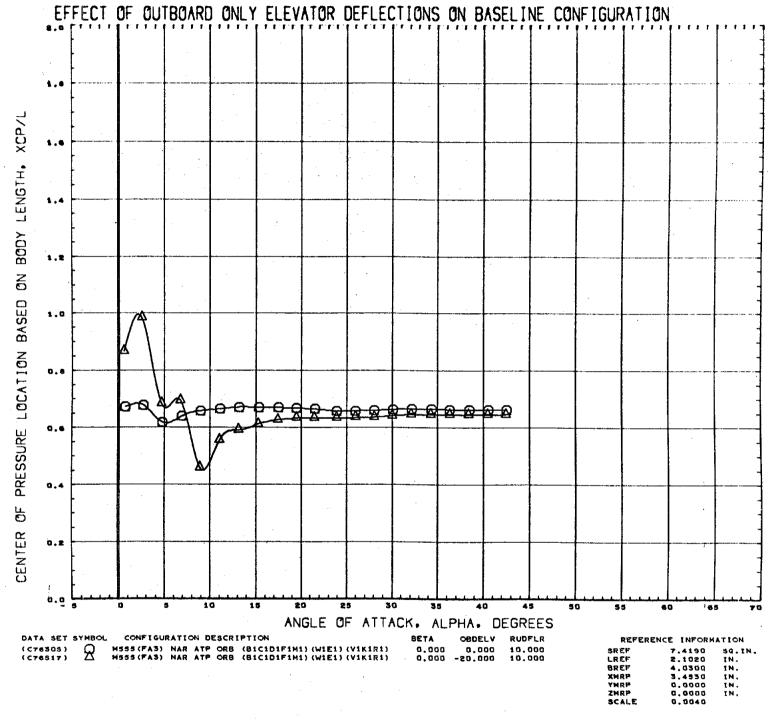


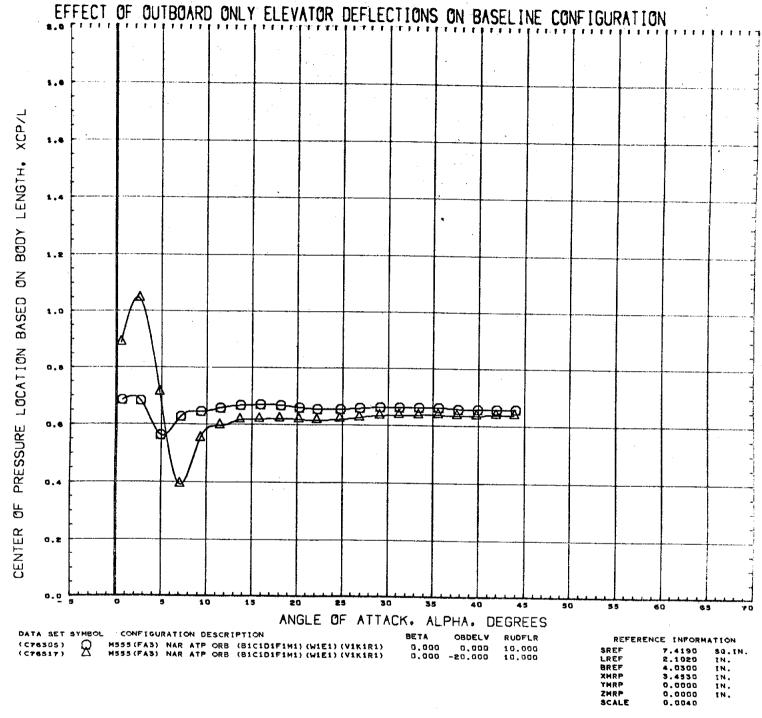
1.20

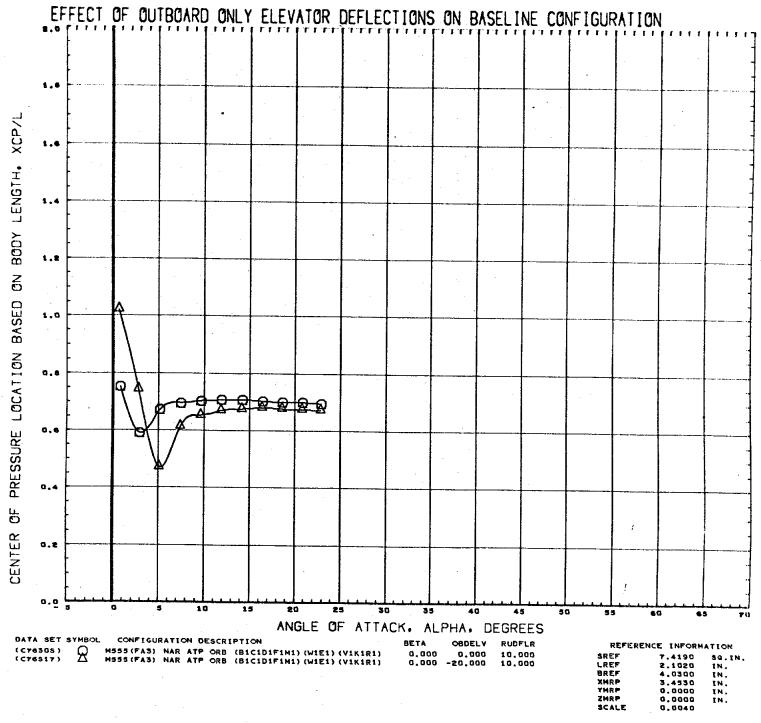






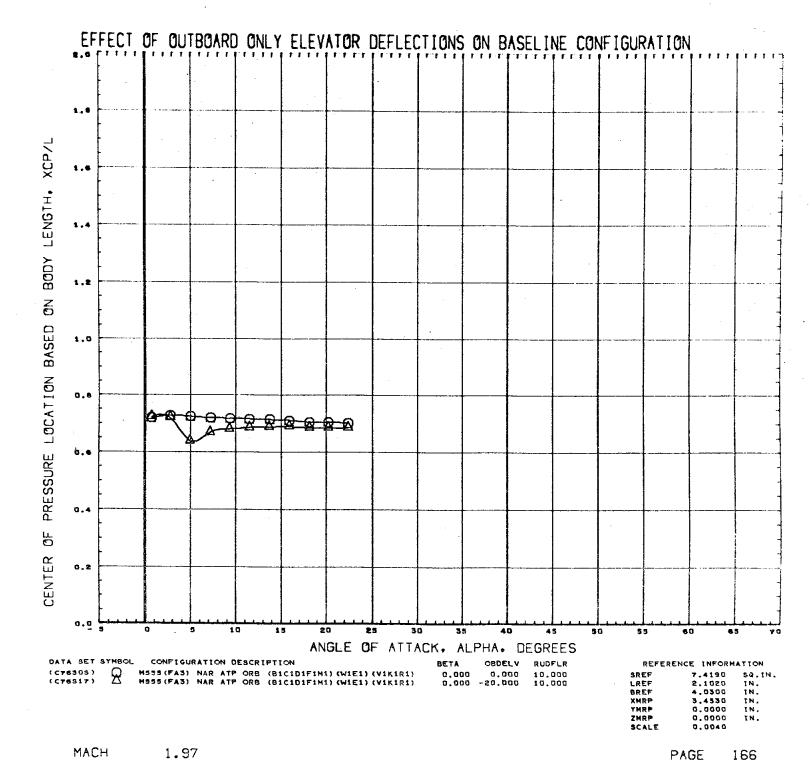


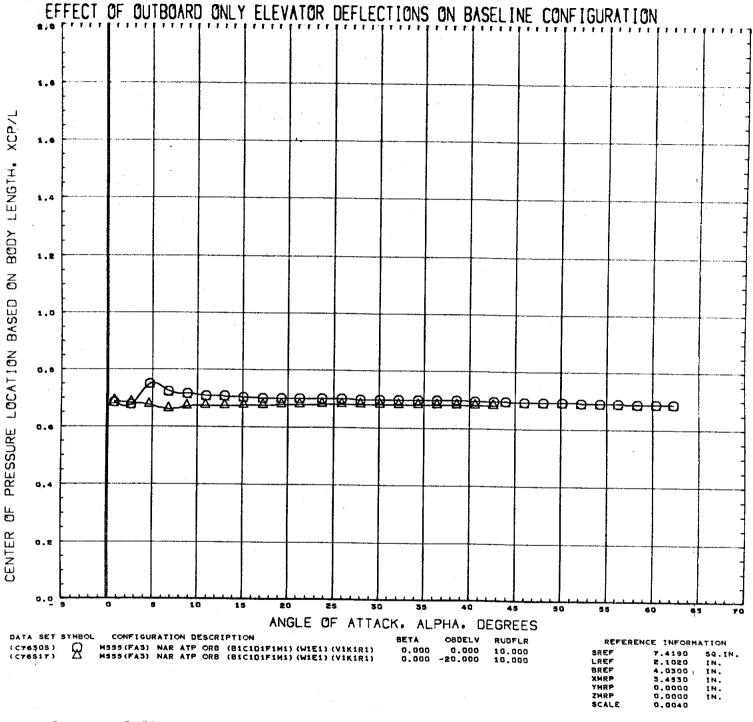




1.20

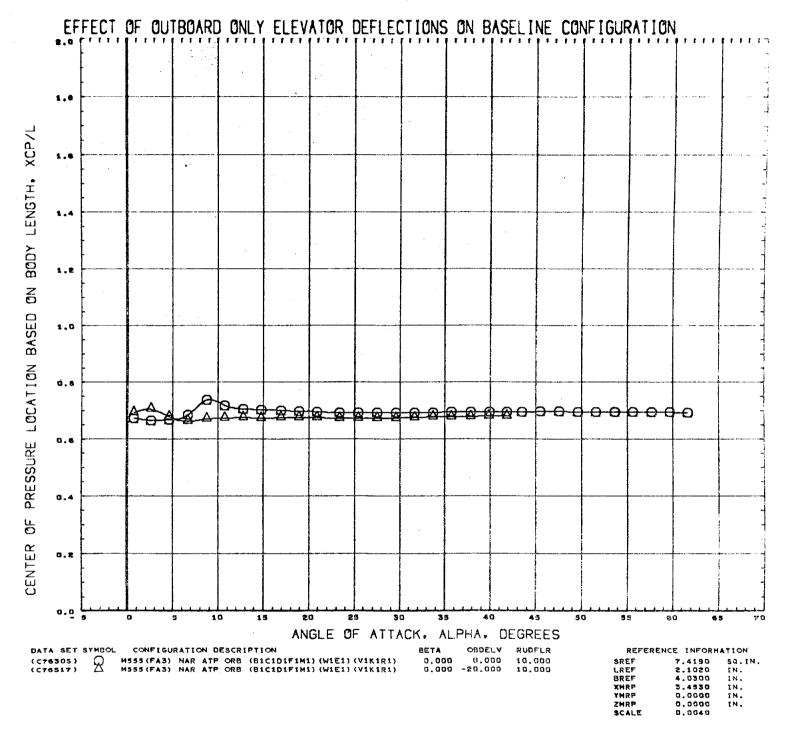
PAGE





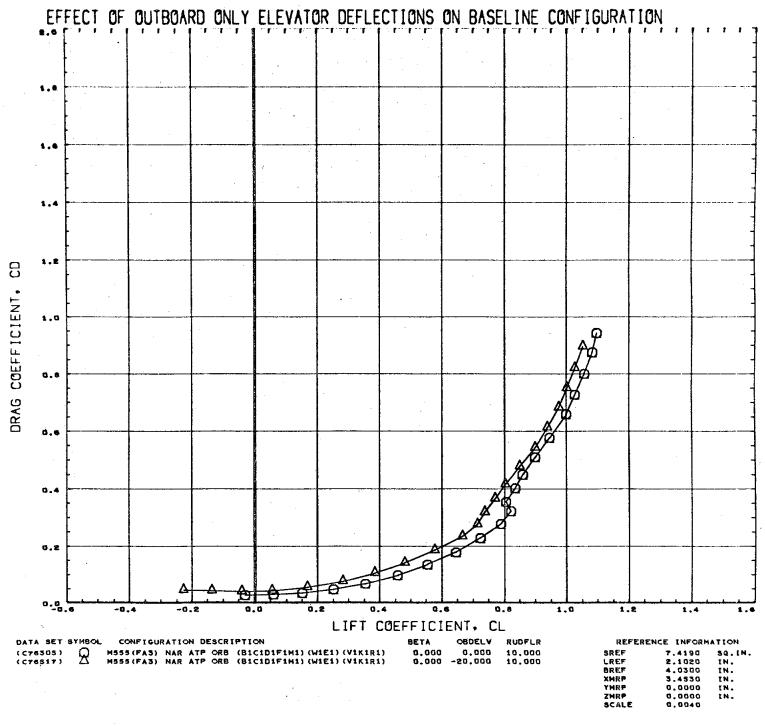
2.99

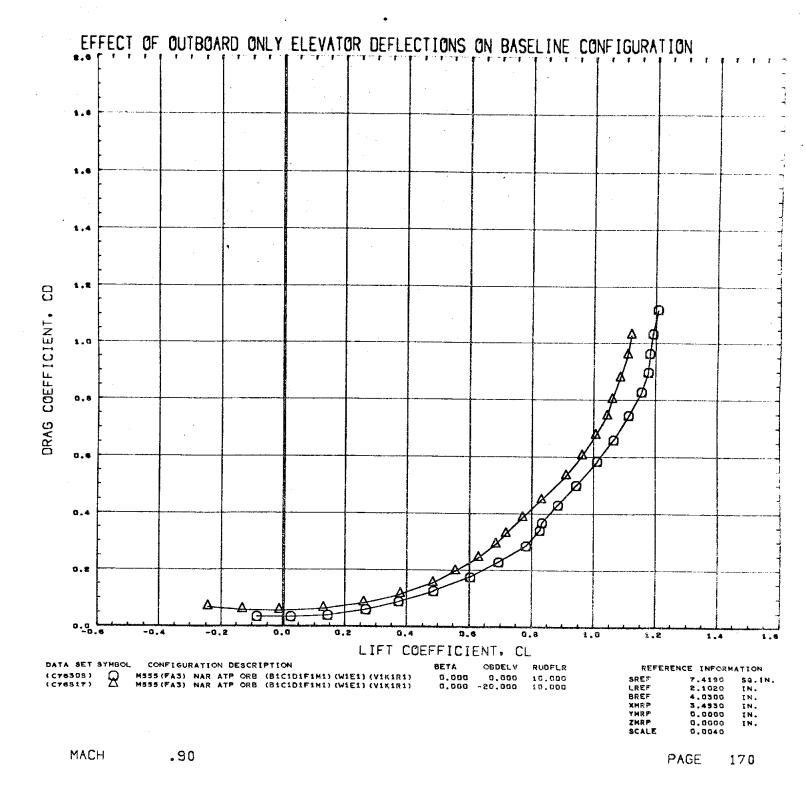
PAGE

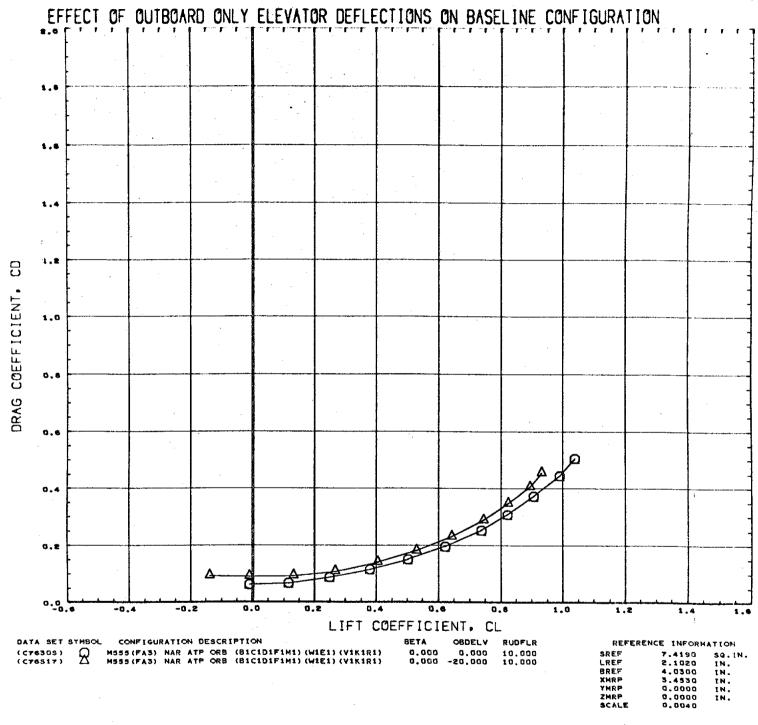


4.96

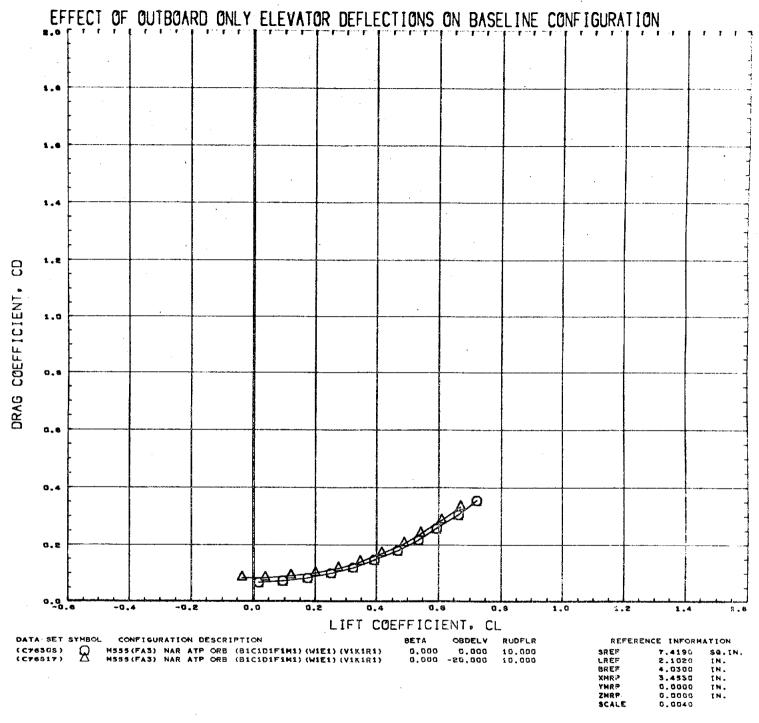
PAGE



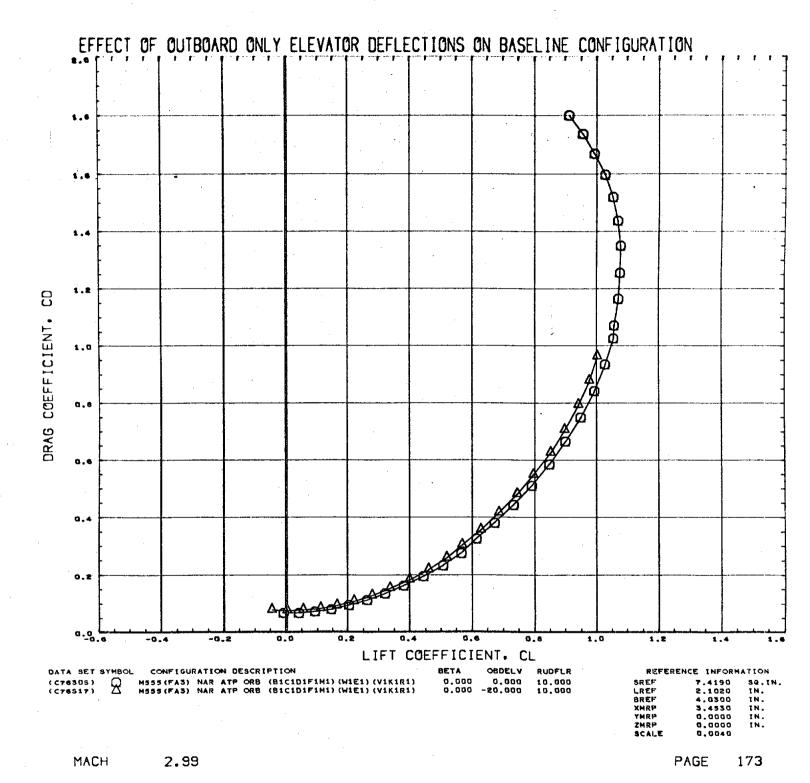


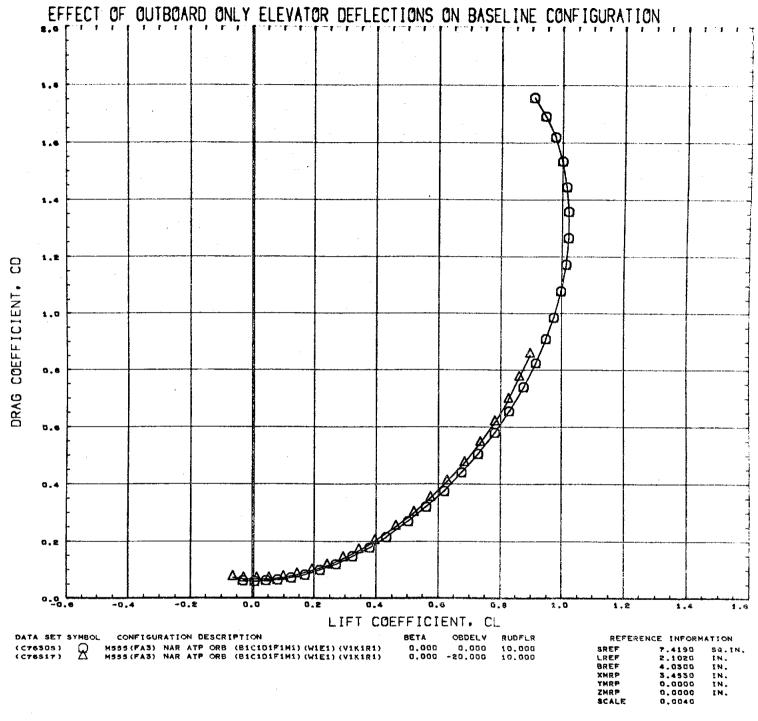


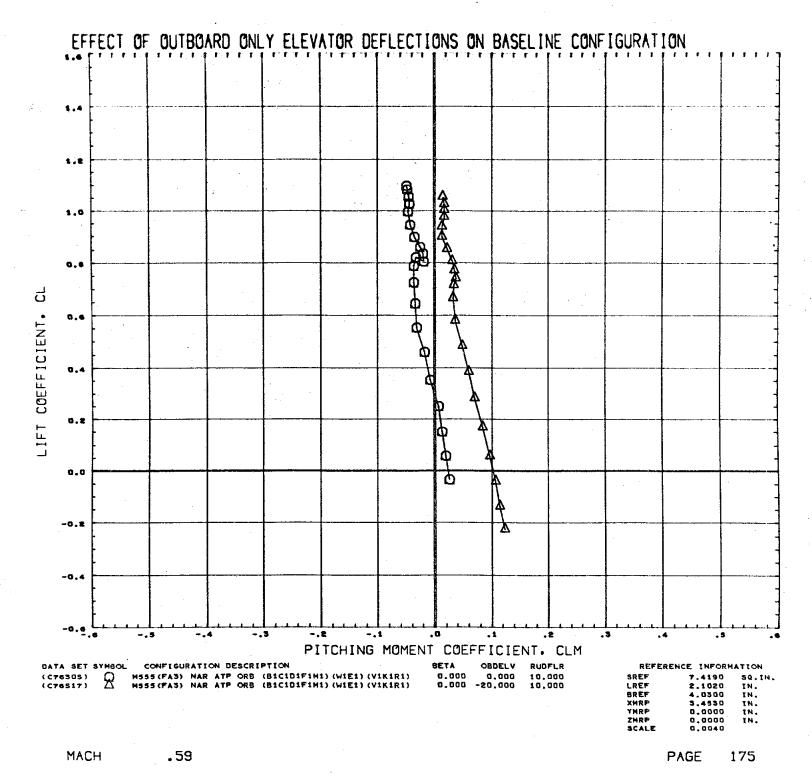
PAGE 17

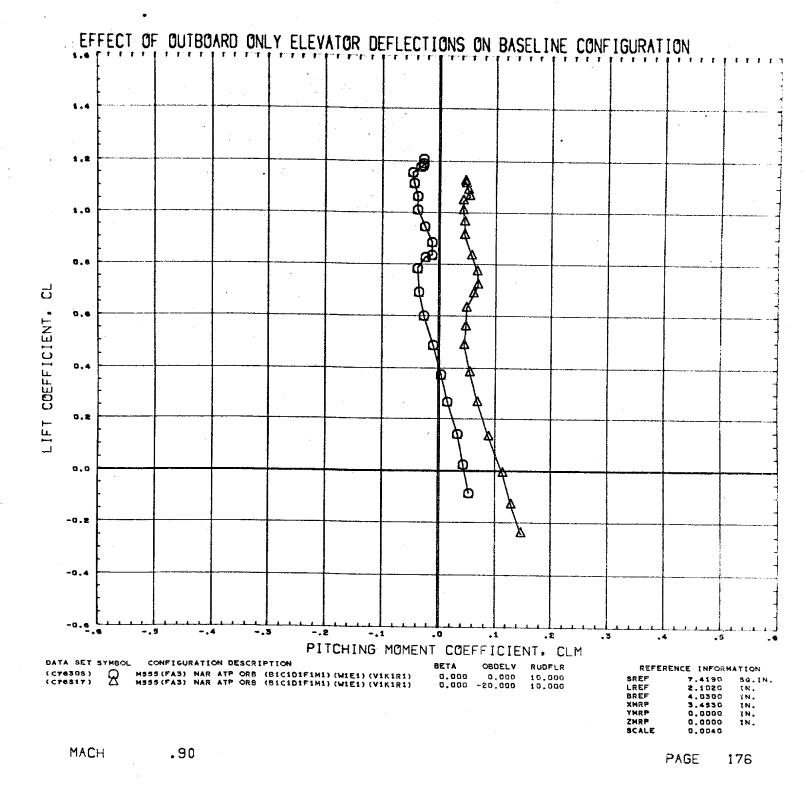


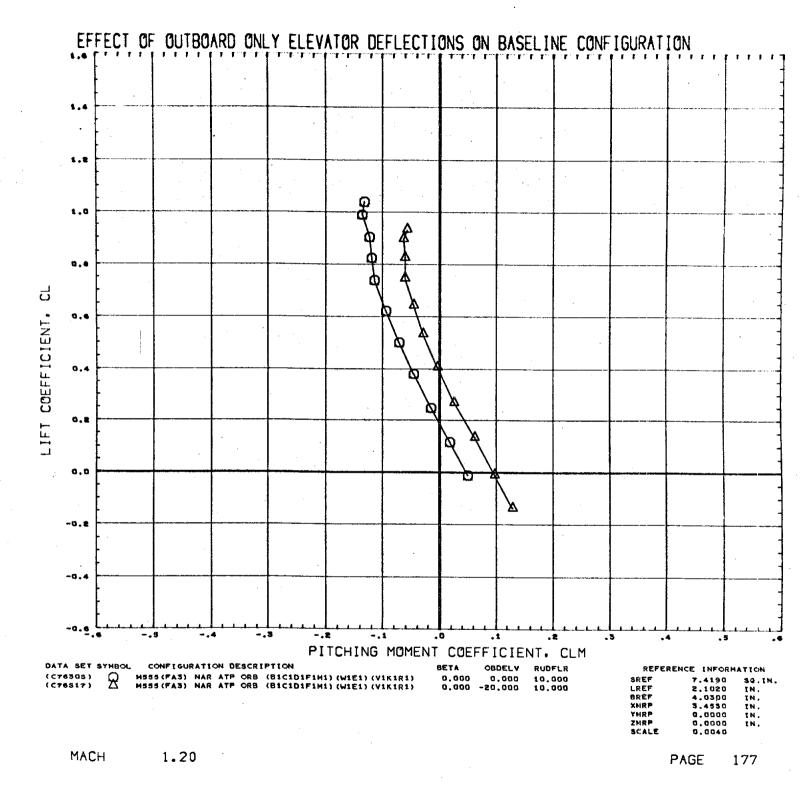
1.97

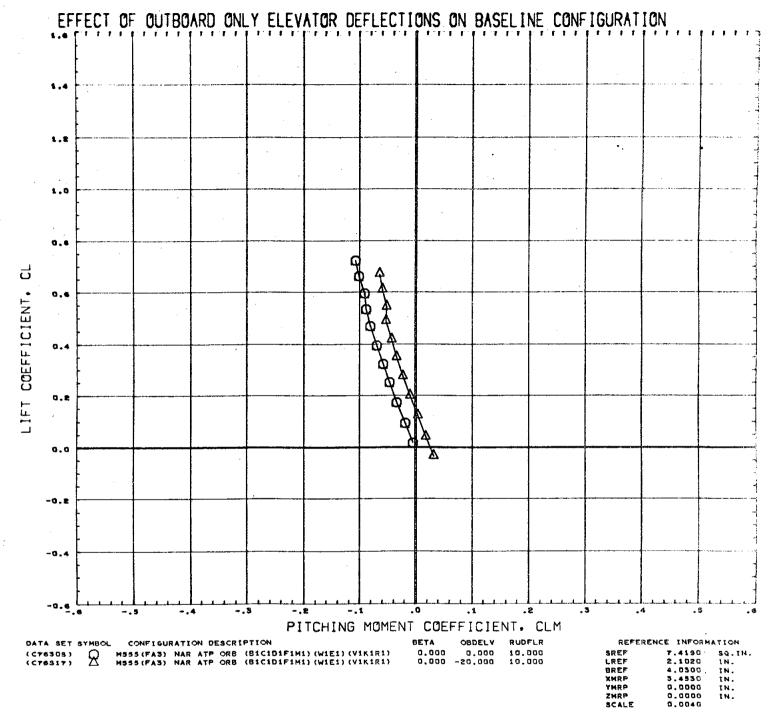






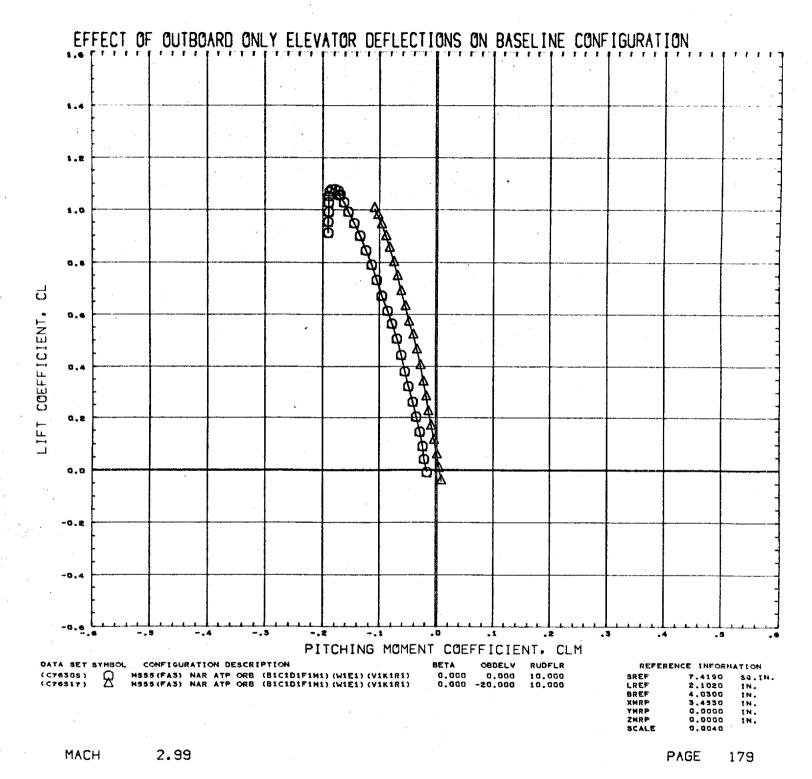


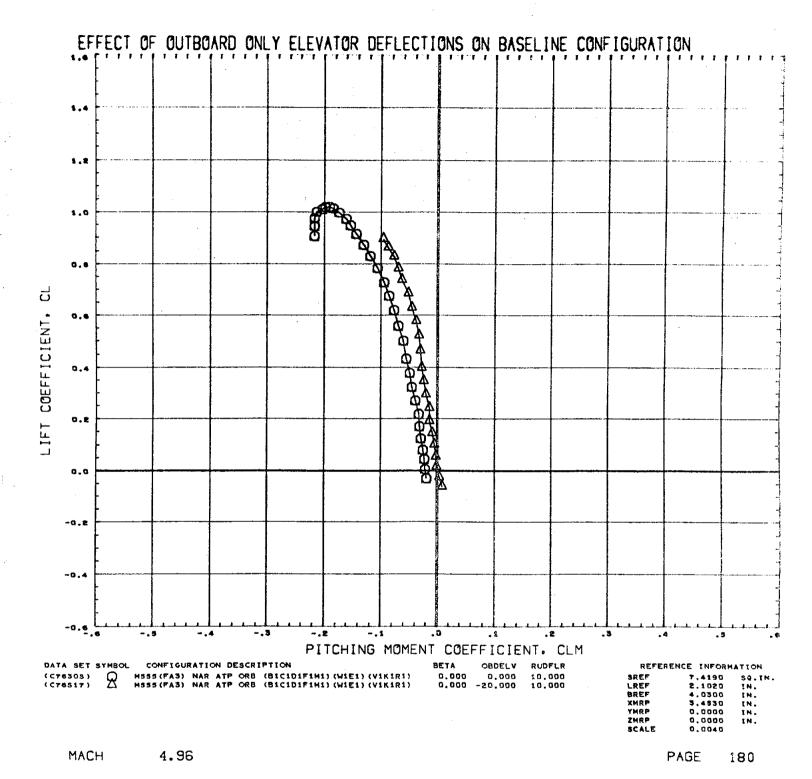


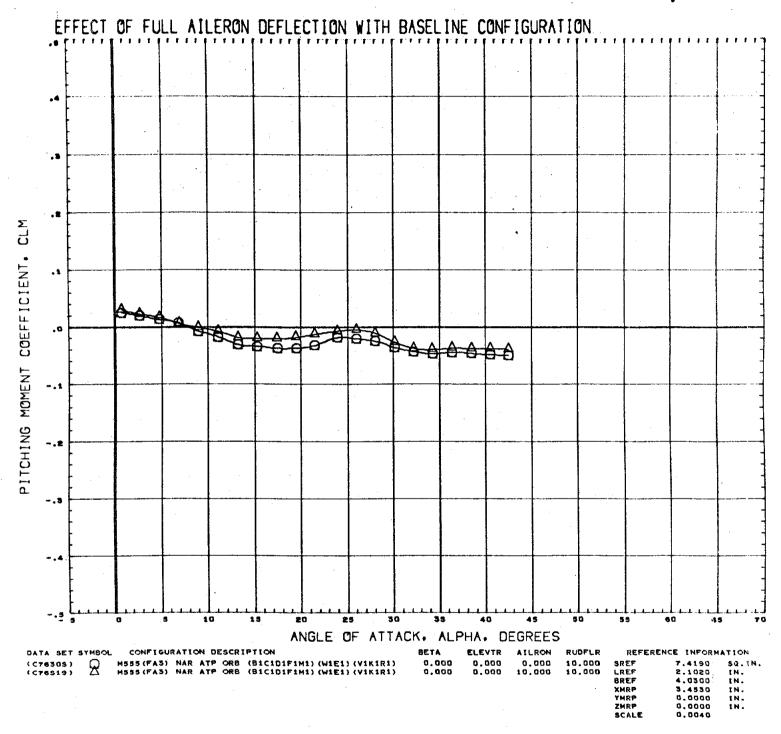


PAGE 178

MACH 1.97

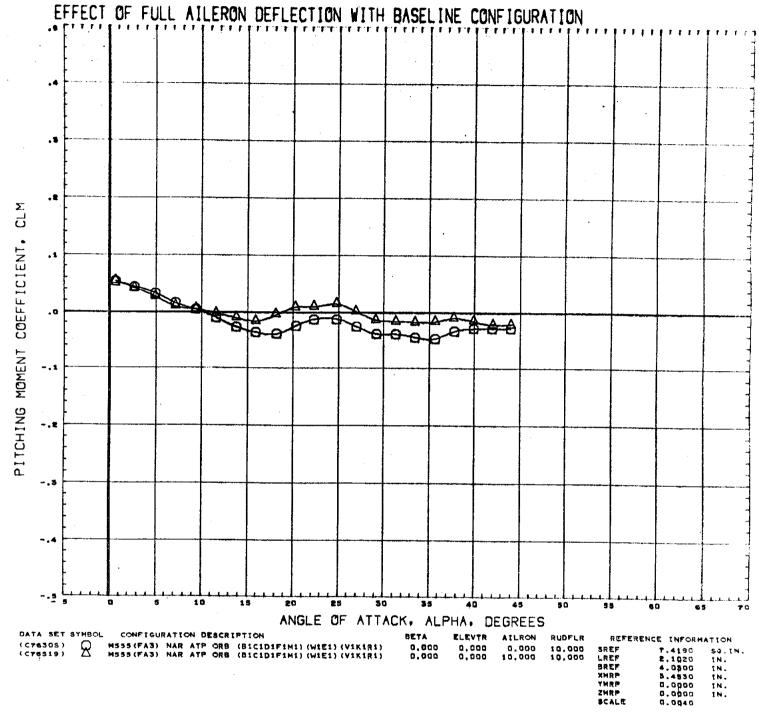


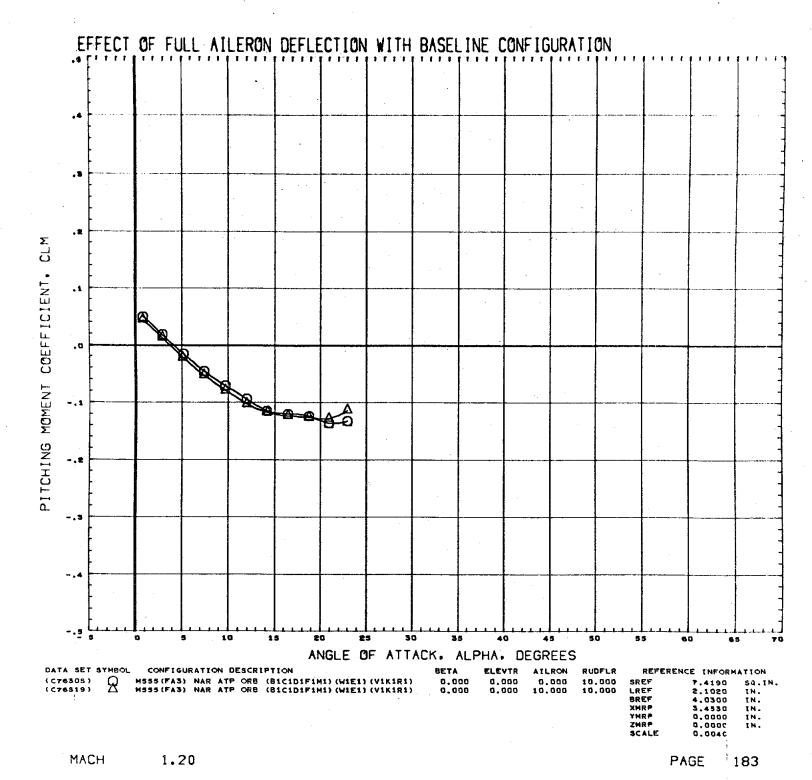


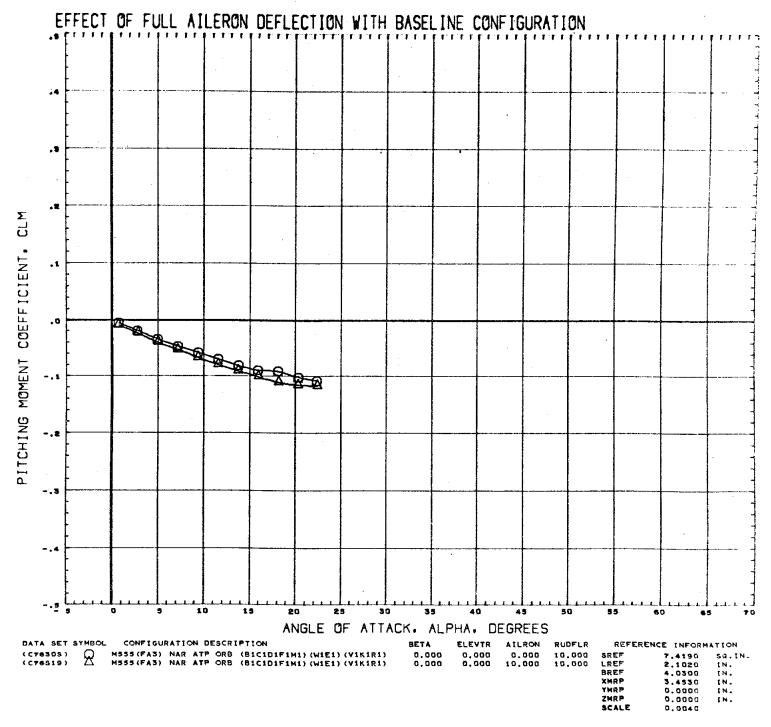


.59

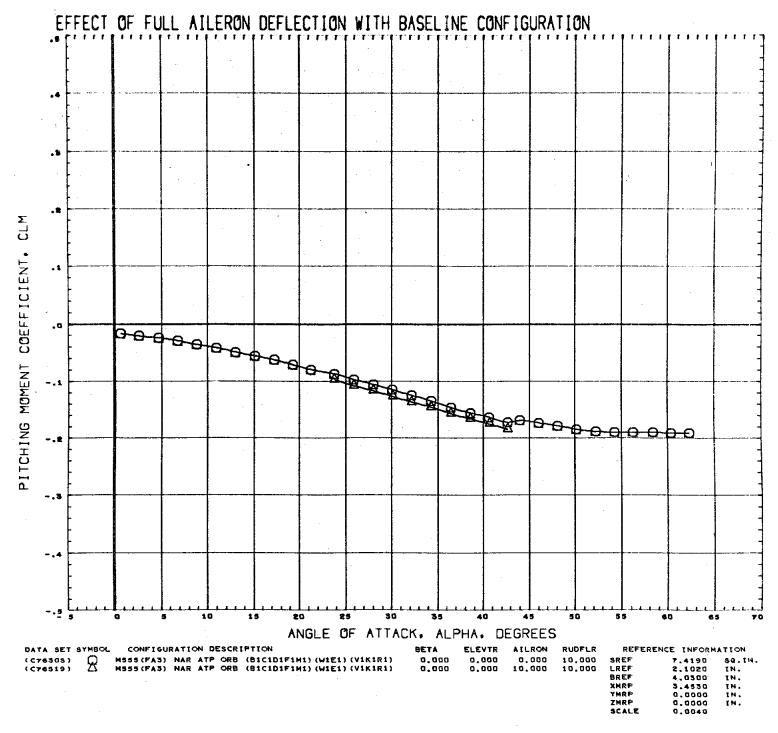
PAGE







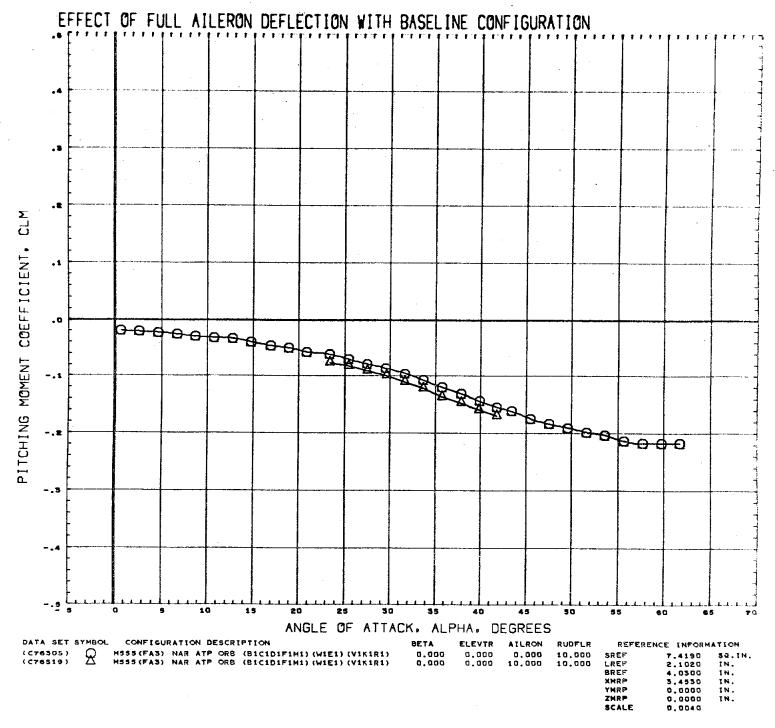
MACH 1.97



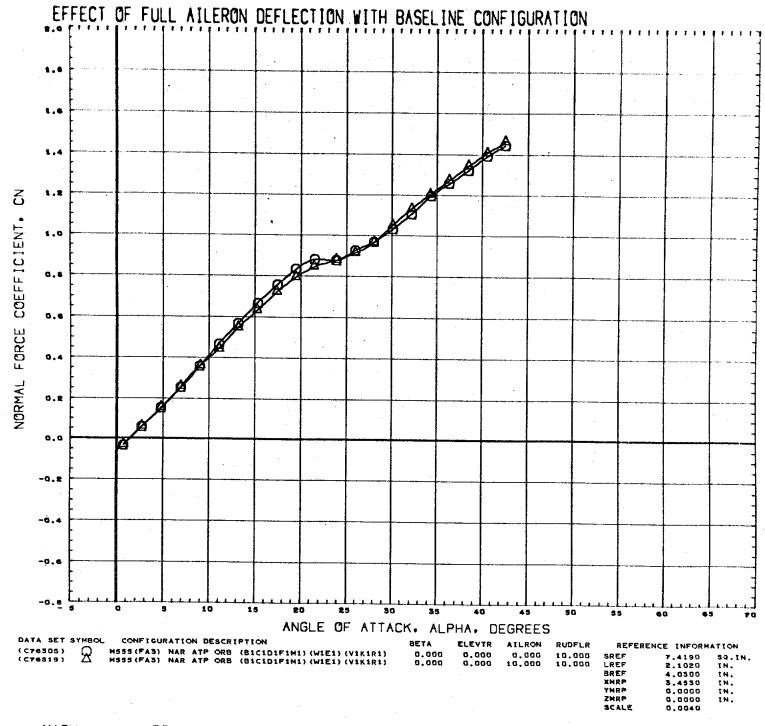
MACH 2.99

PAGE

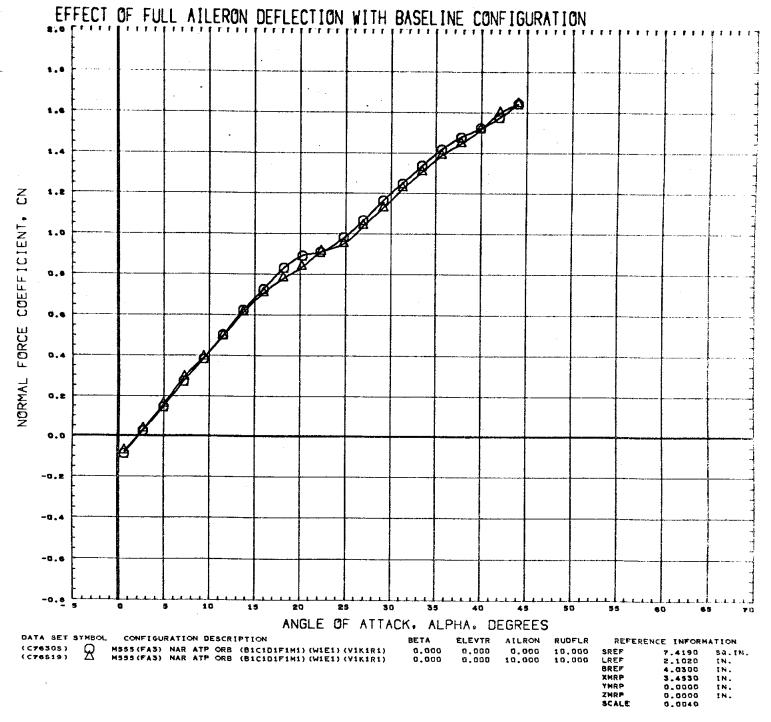
185



MACH 4.96



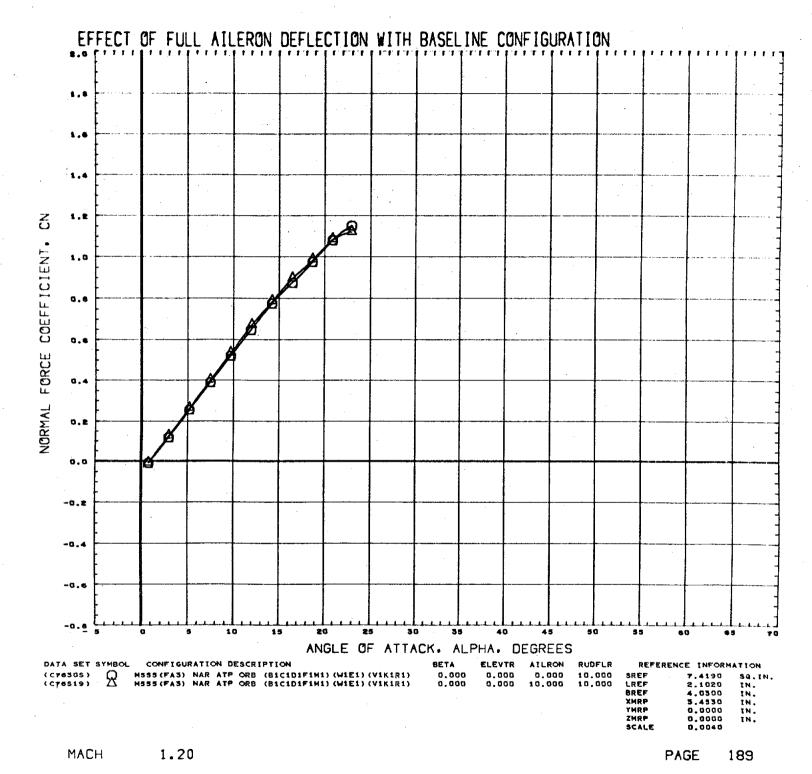
MACH .59

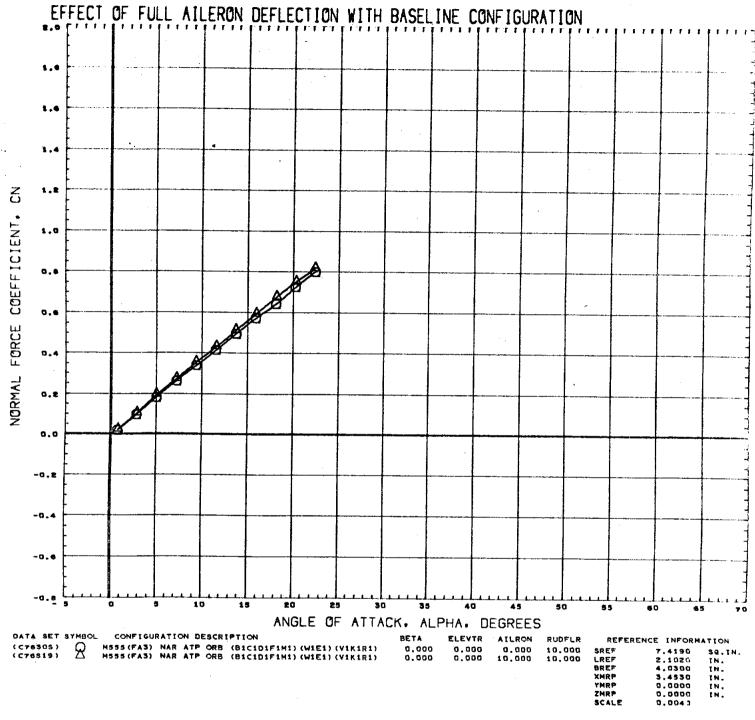


.90

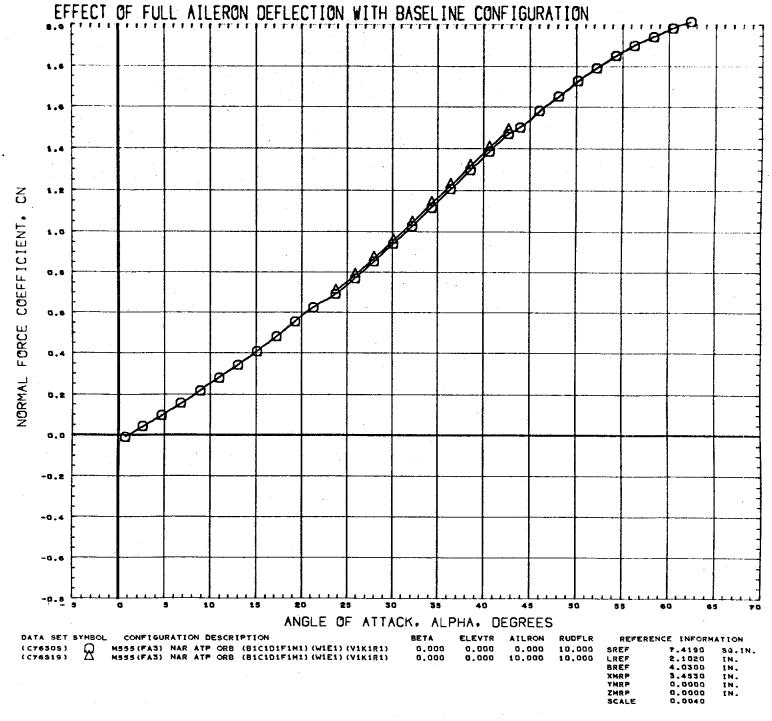
PAGE

188

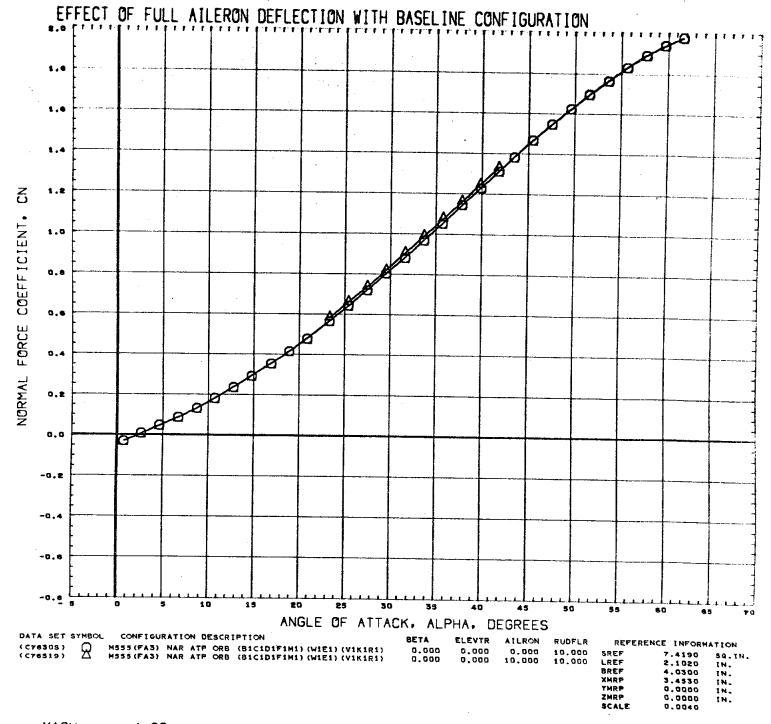




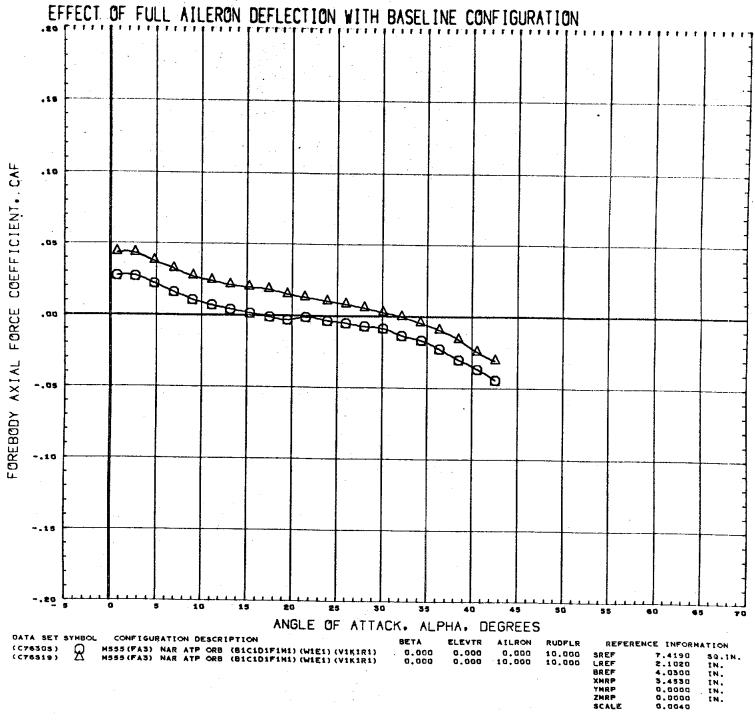
MACH 1.97



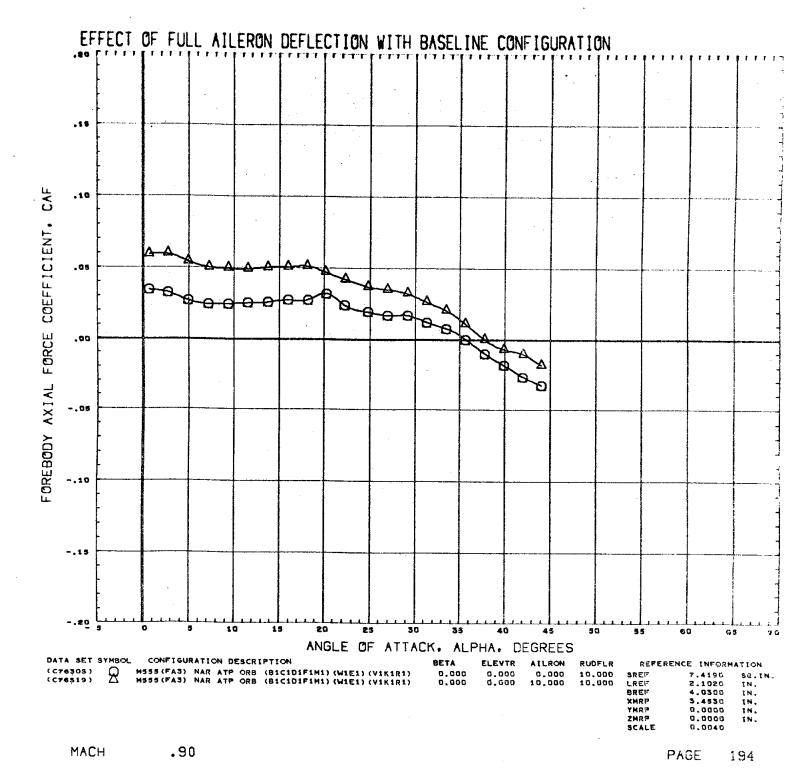
MACH 2.99

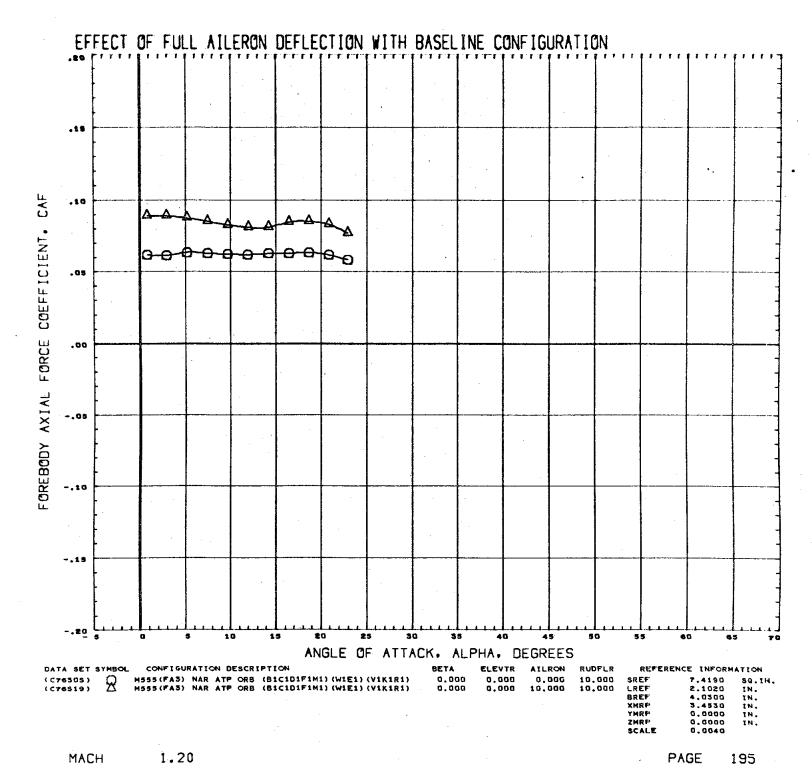


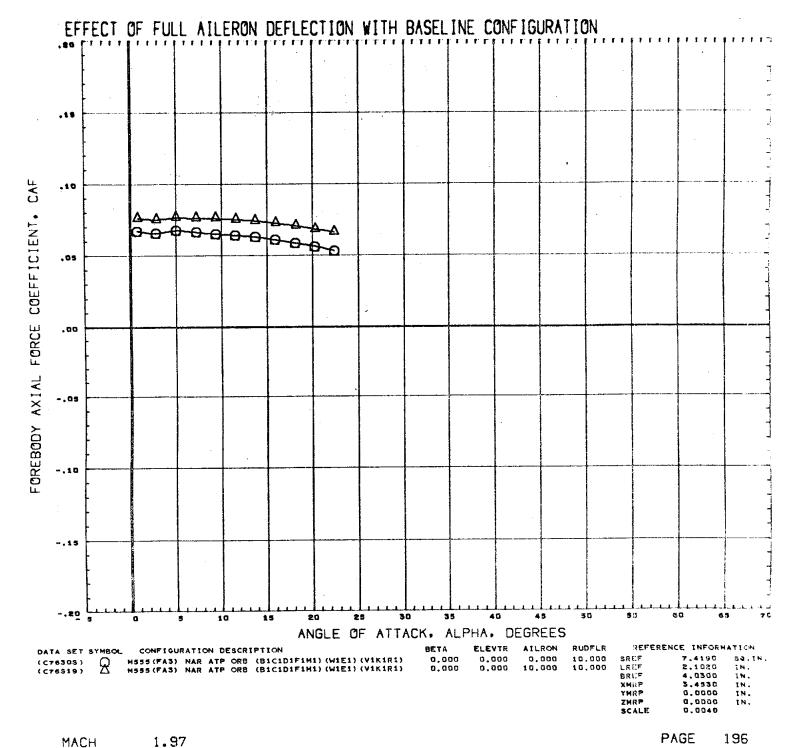
MACH 4.96

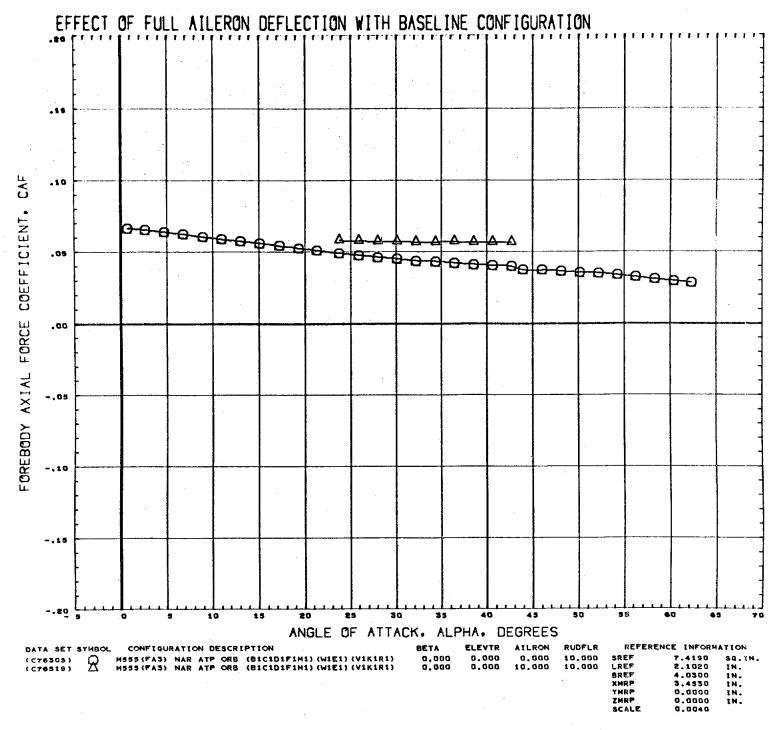


MACH .59



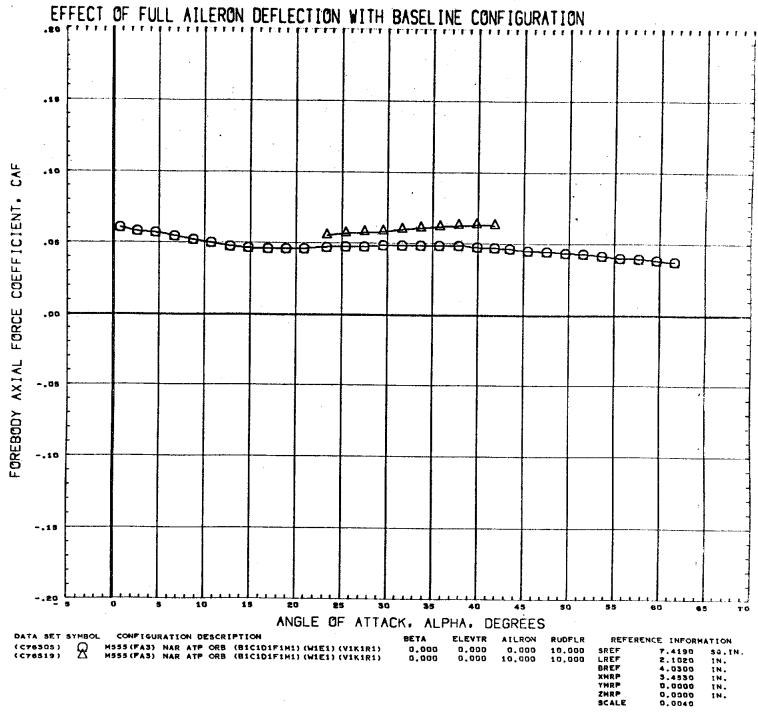




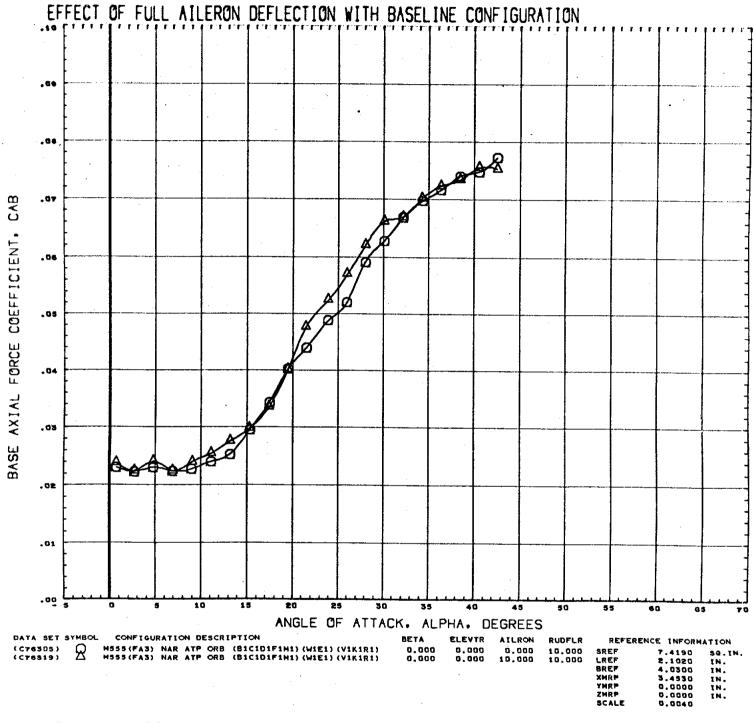


2.99

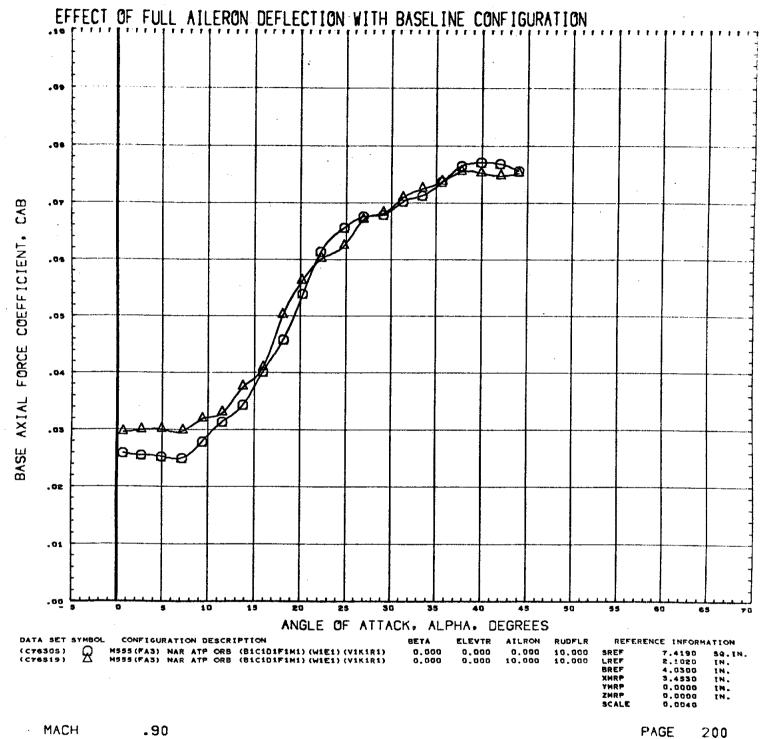
MACH



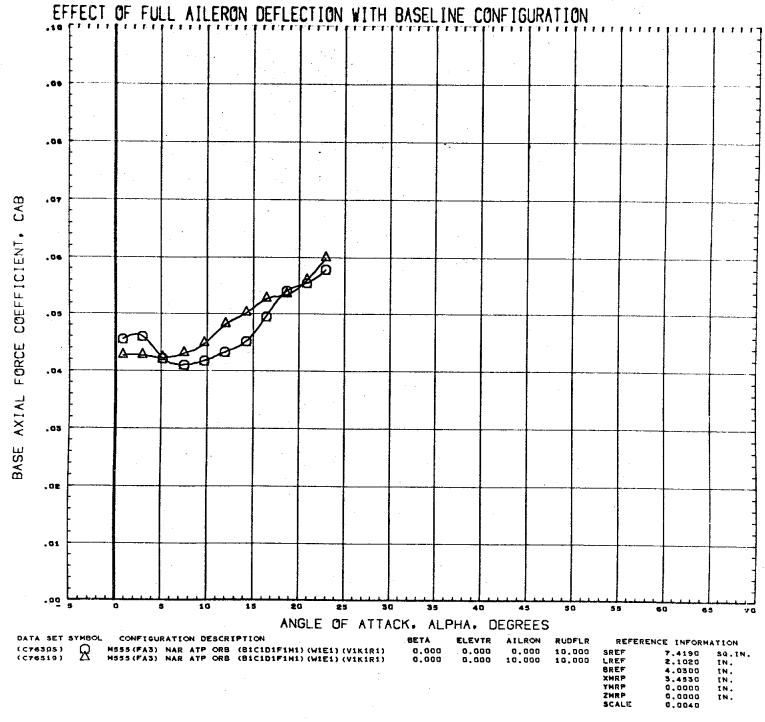
MACH 4.96



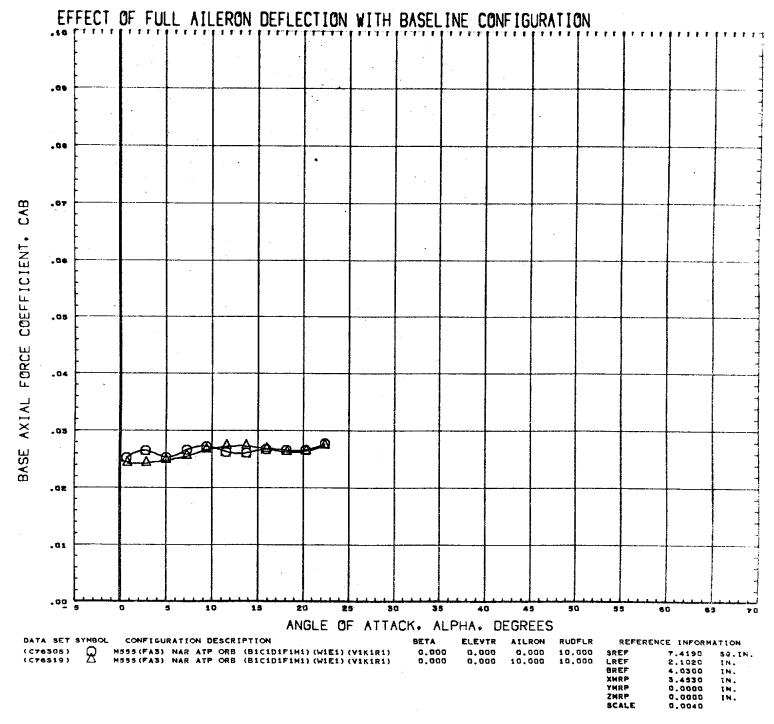
MACH .59



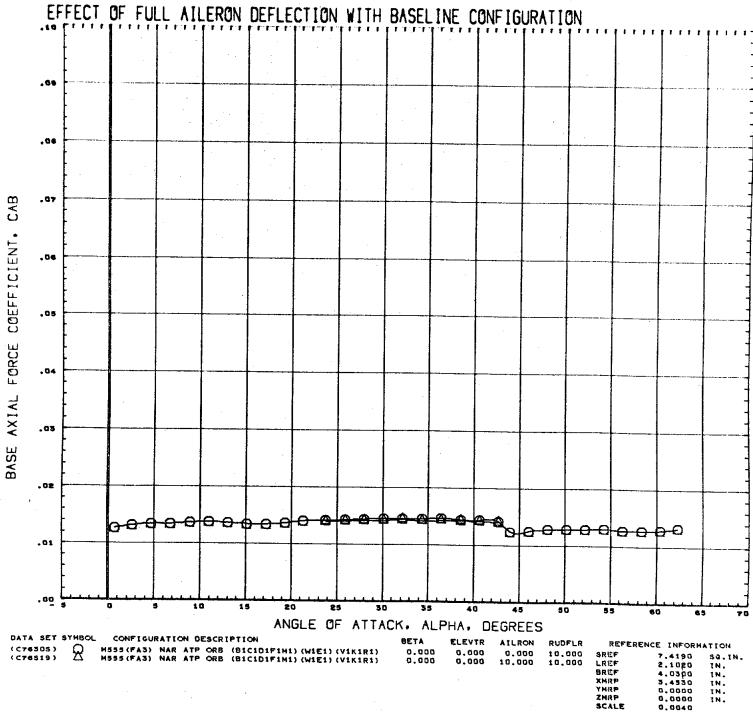
.90



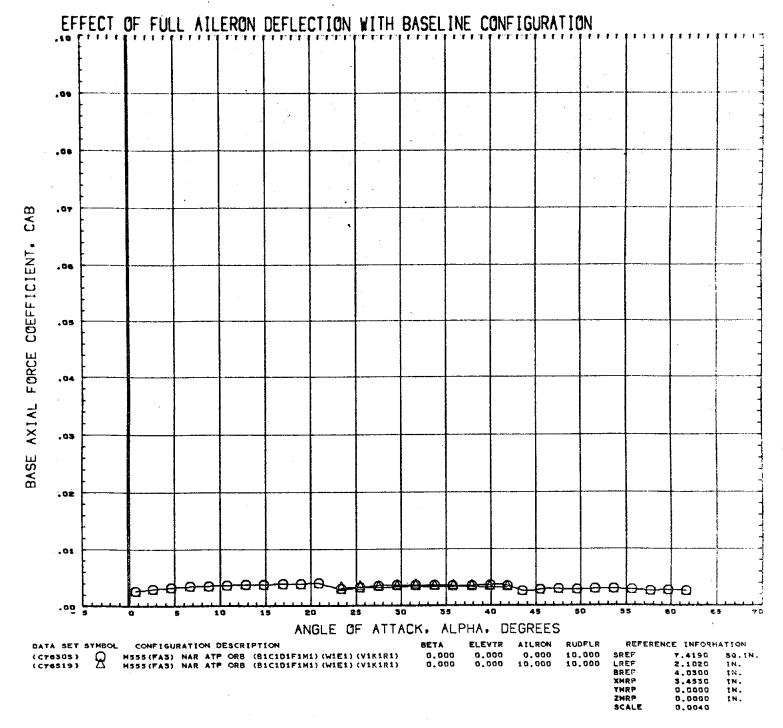
1.20



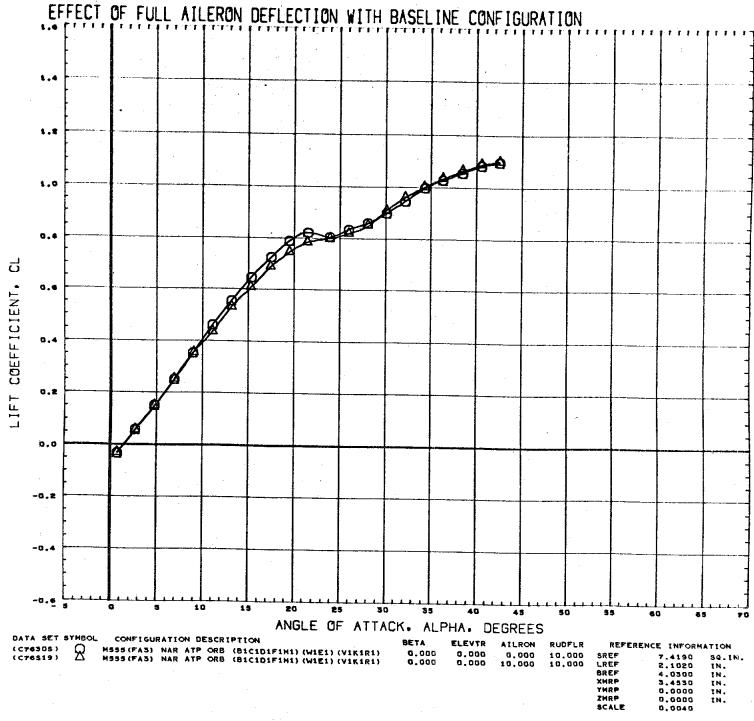
MACH 1.97



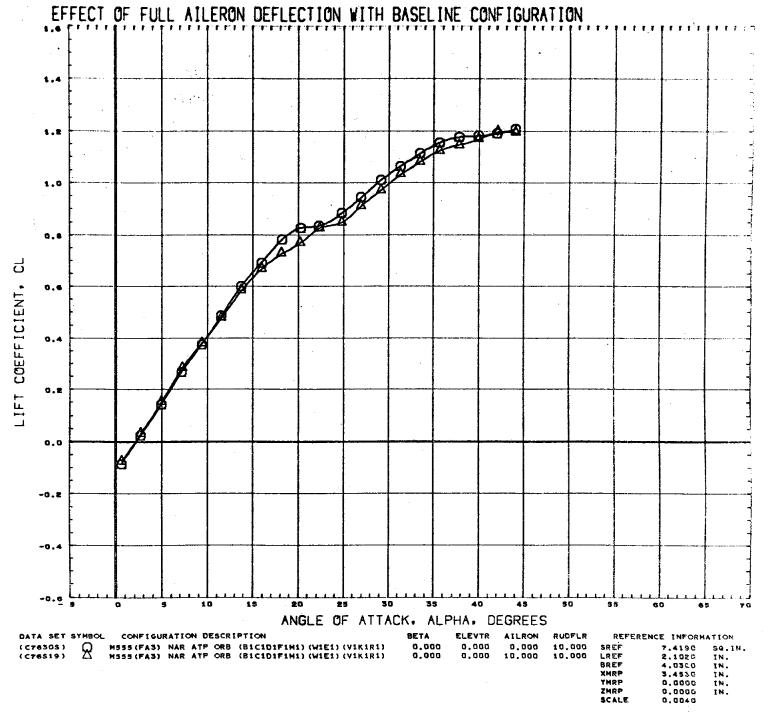
2.99



4.96



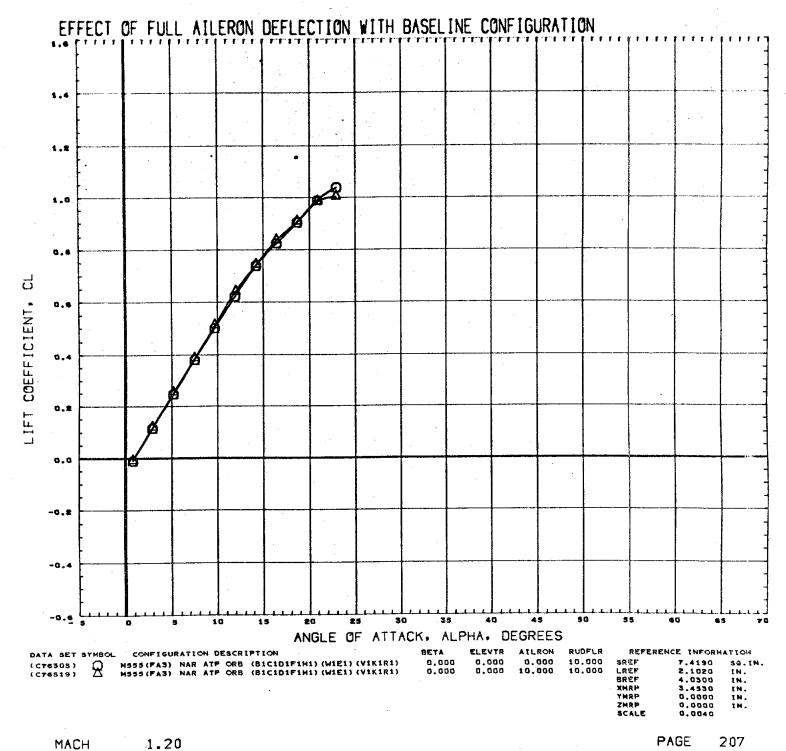
.59

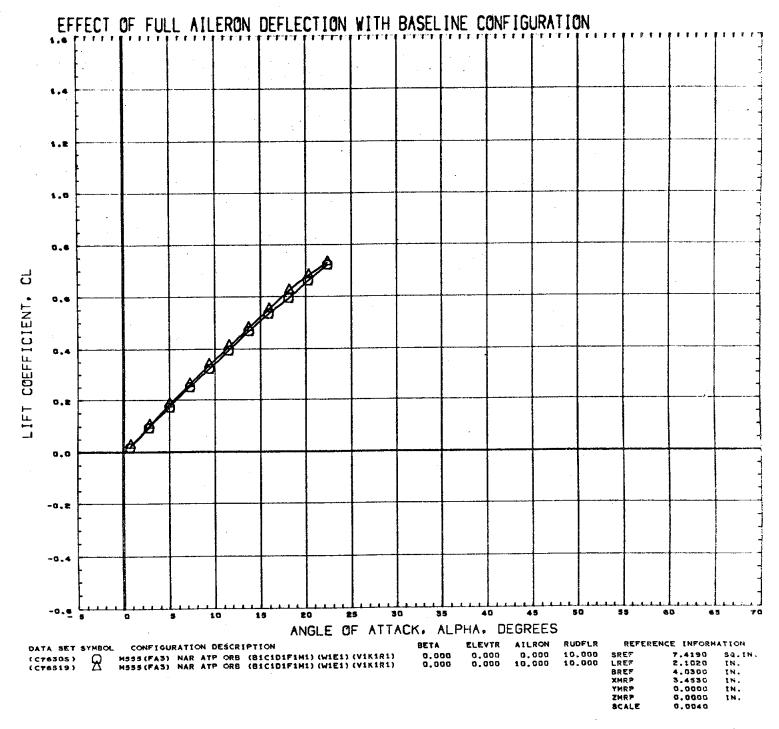


.90

PAGE

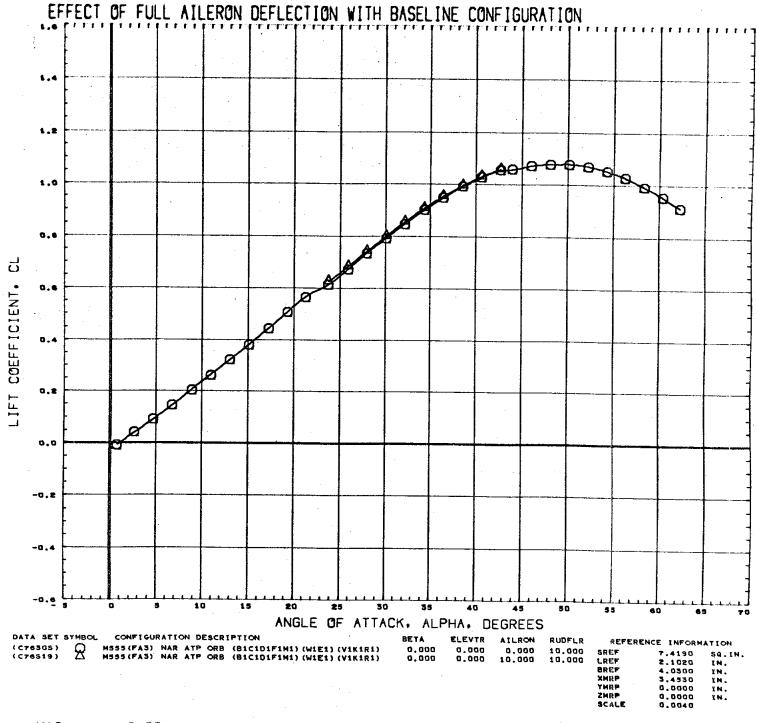
206



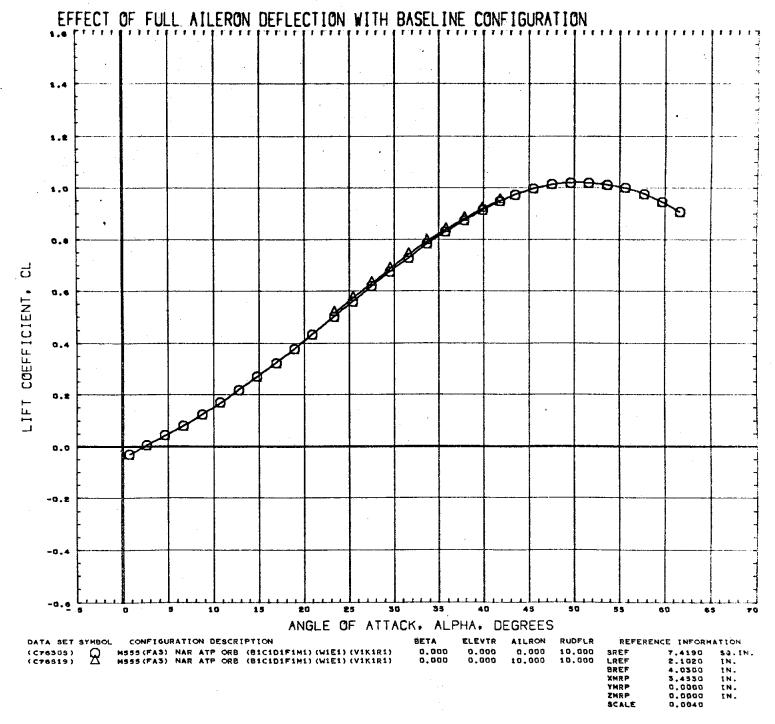


1.97

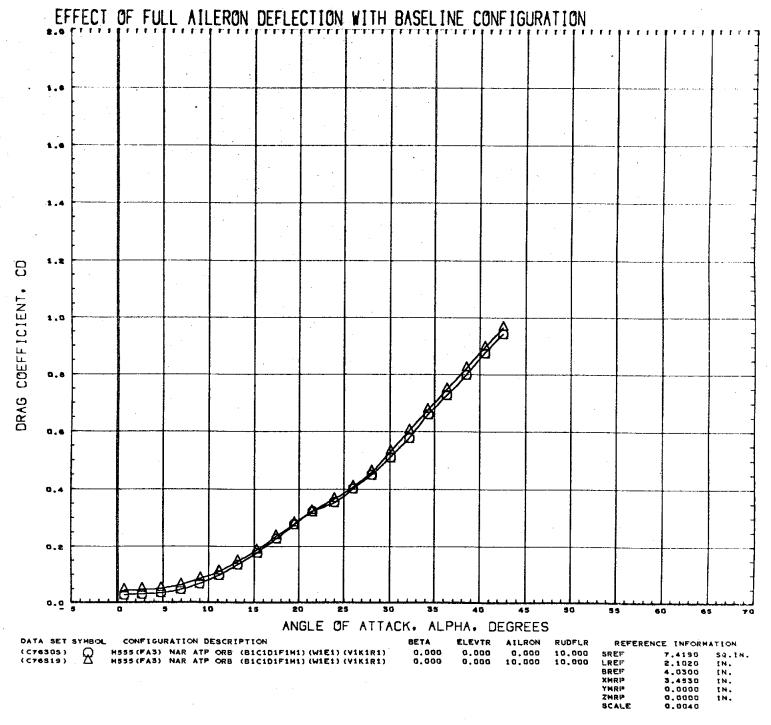
MACH



MACH 2.99



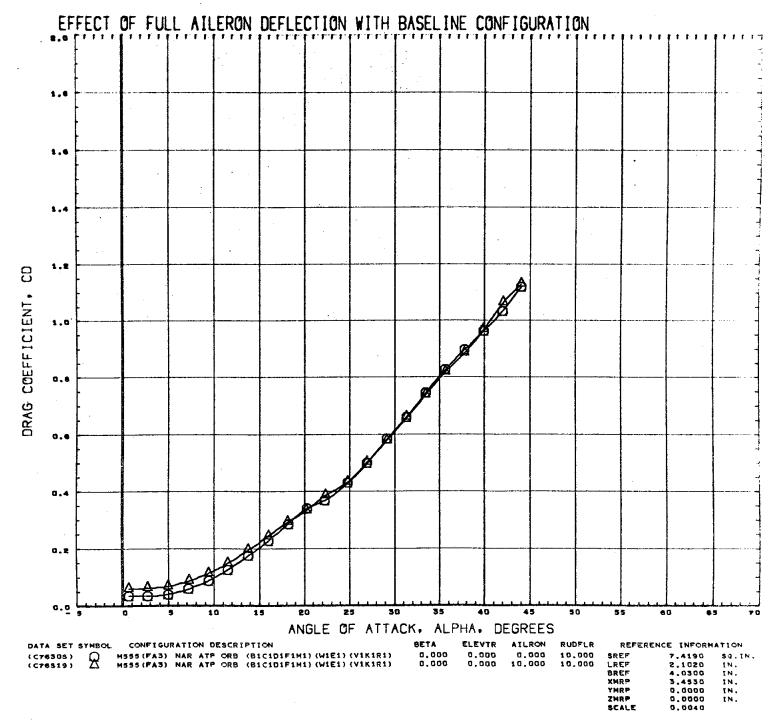
MACH 4.96



.59

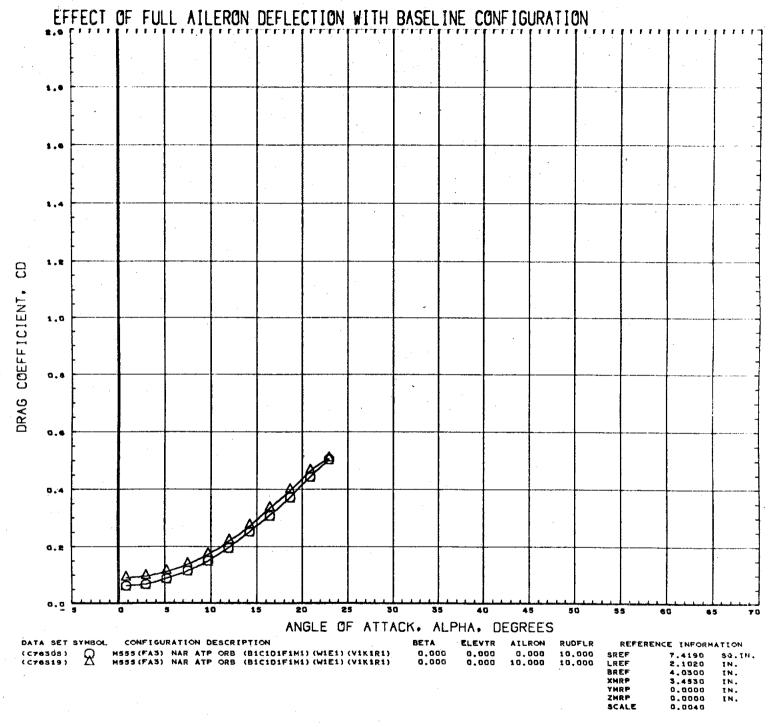
PAGE

211



.90

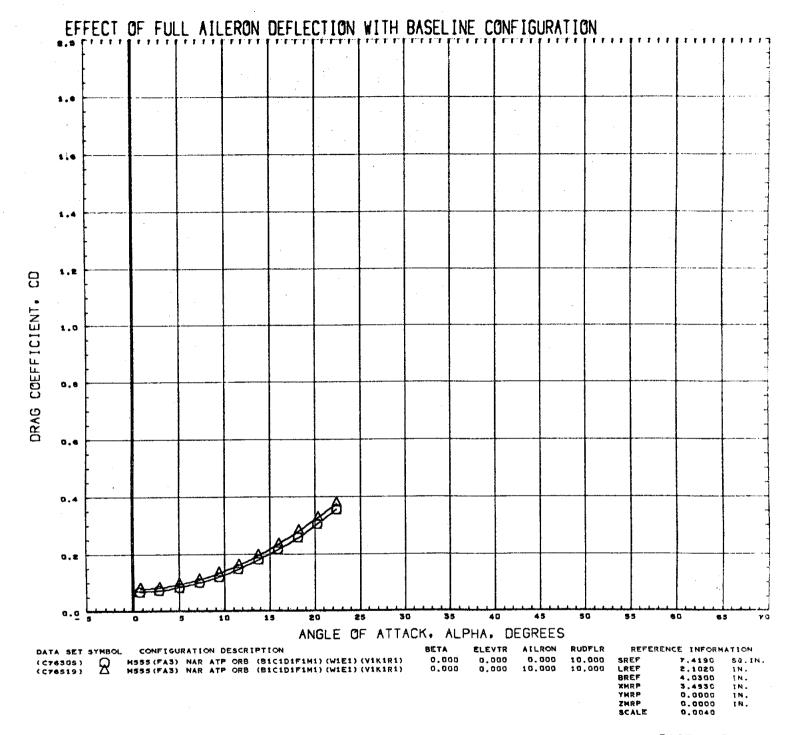
PAGE _ 212



1.20

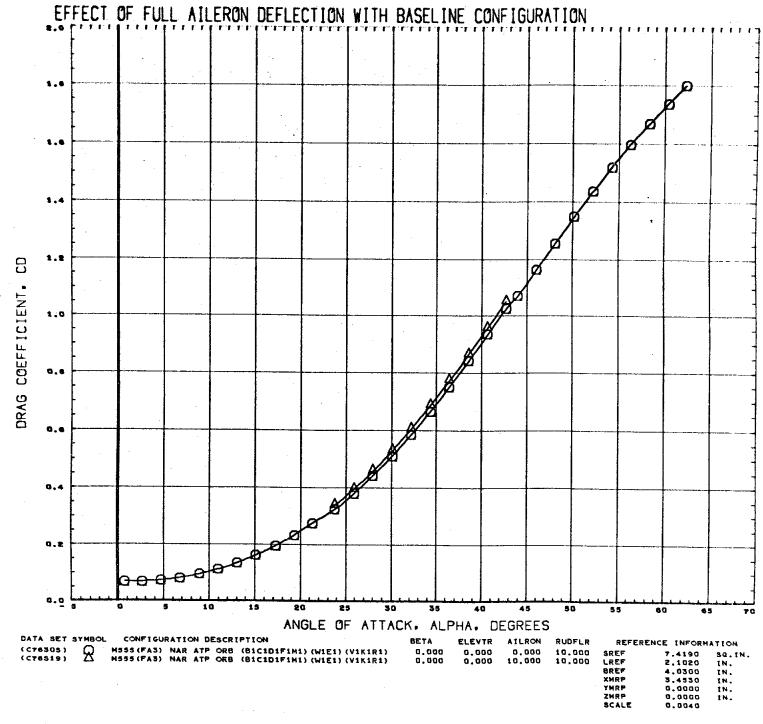
PAGE

213

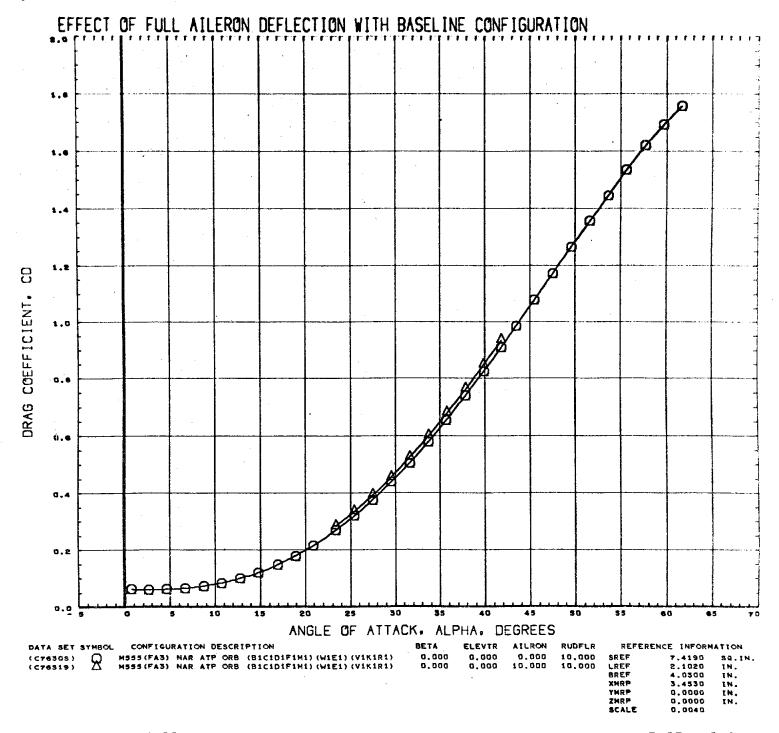


PAGE 214

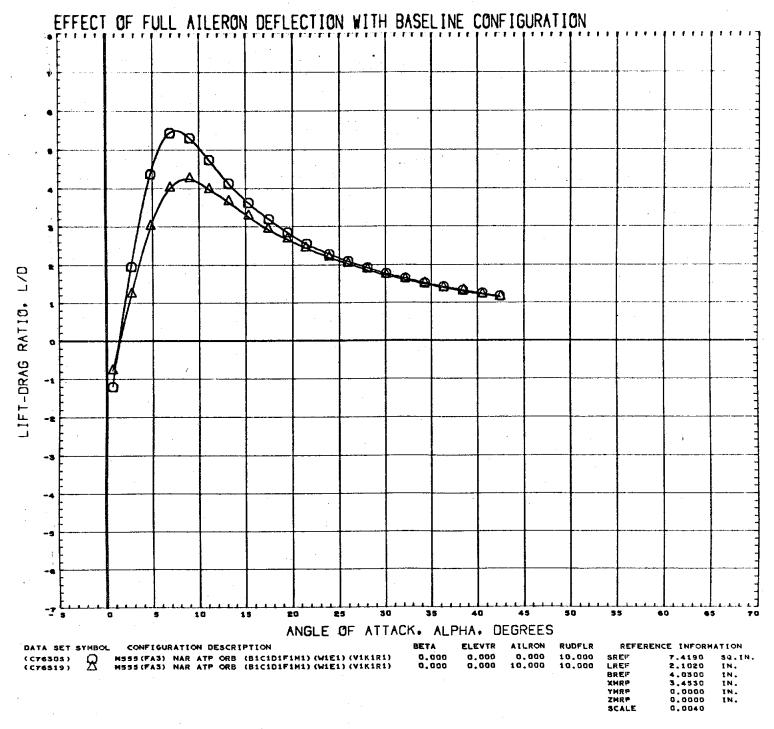
MACH 1.97

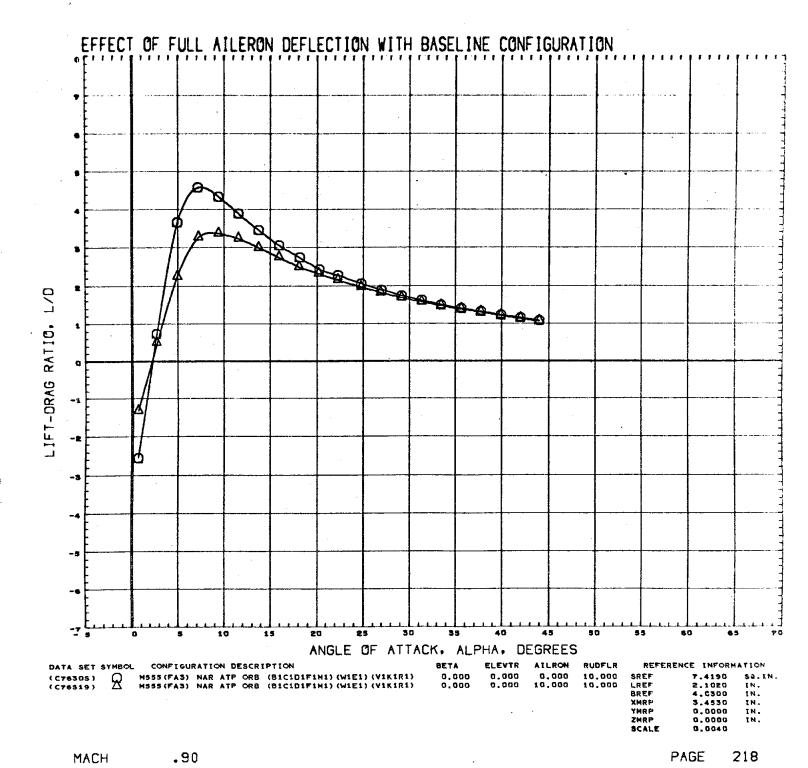


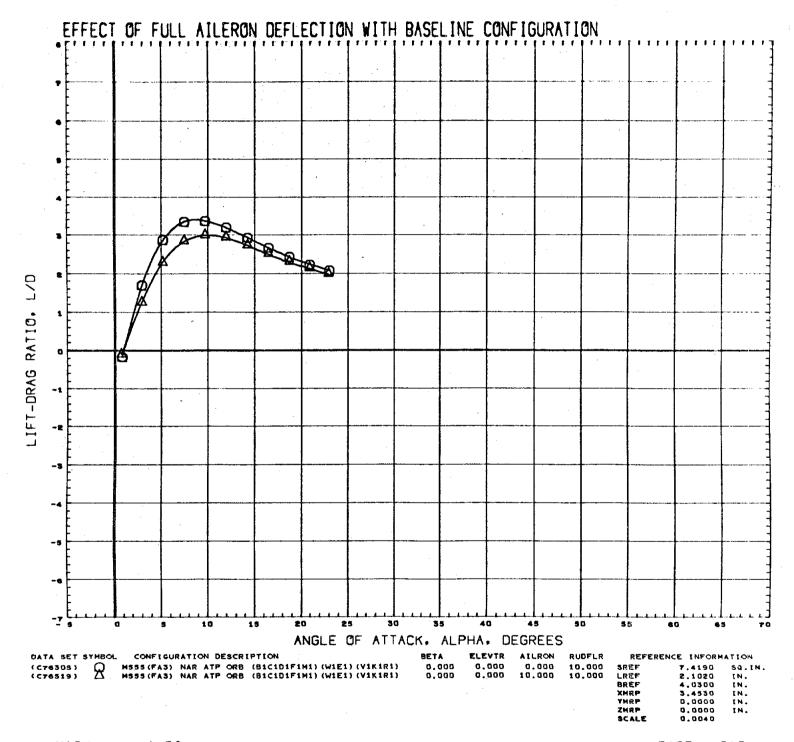
2.99



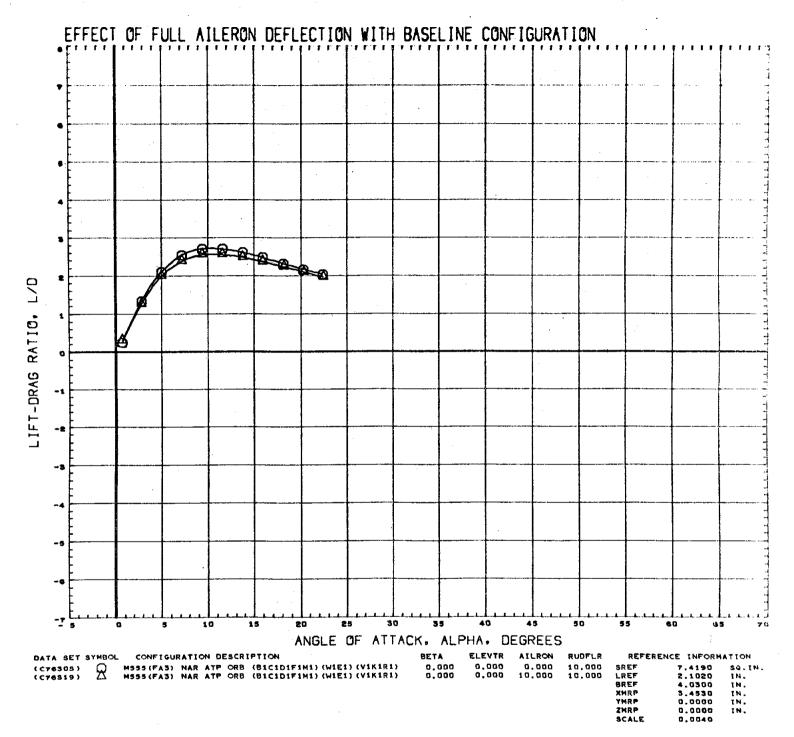
MACH 4.96



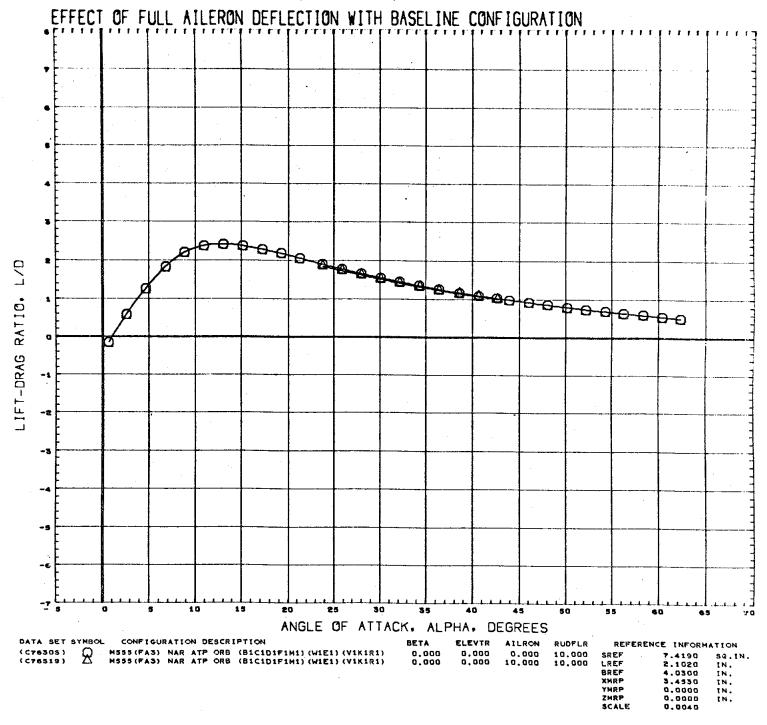




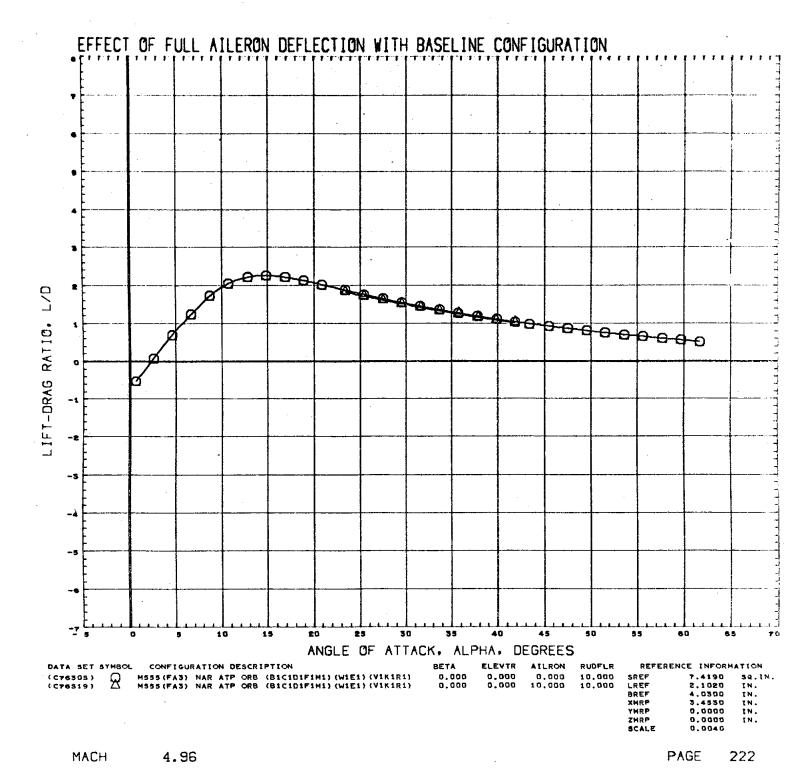
MACH 1.20

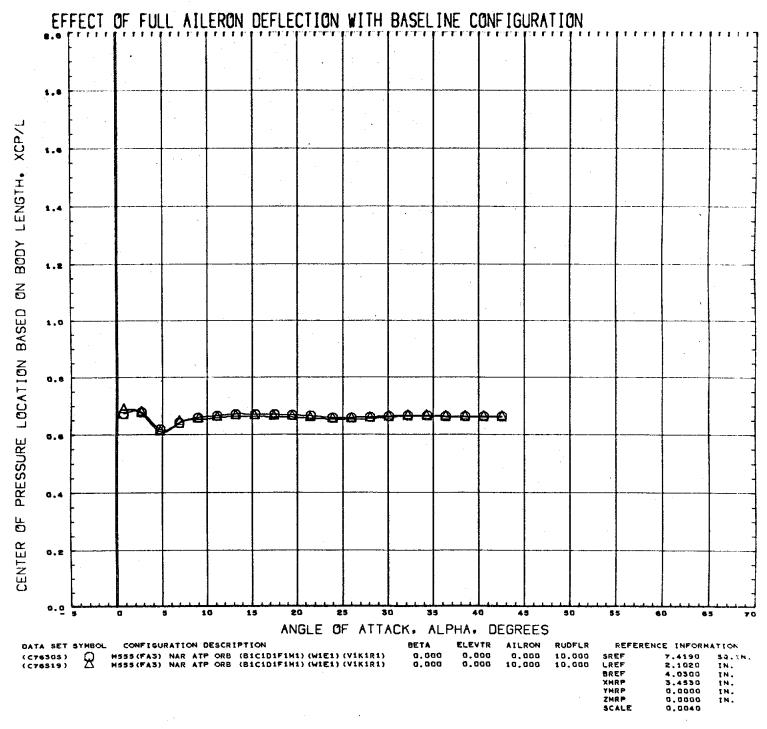


MACH 1.97 PAGE 220

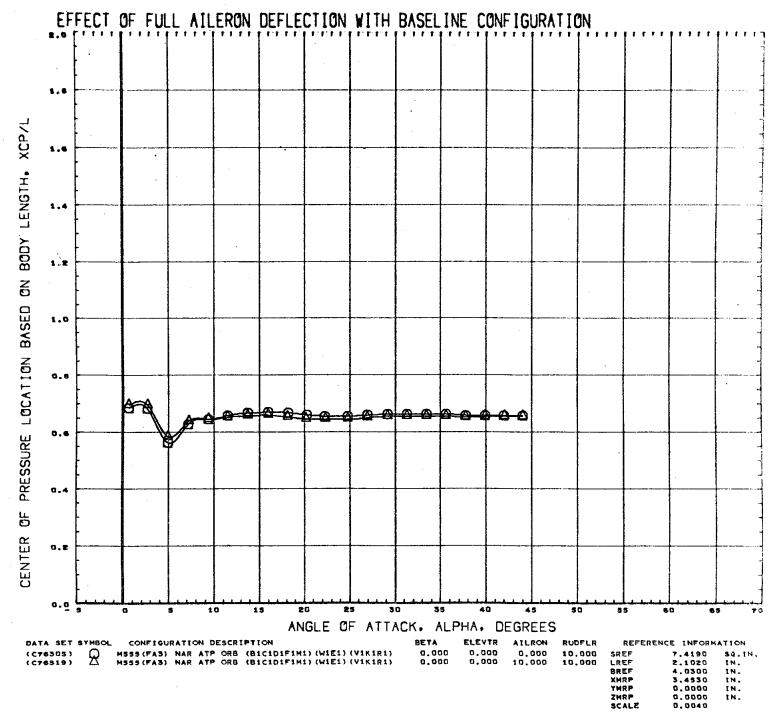


2.99

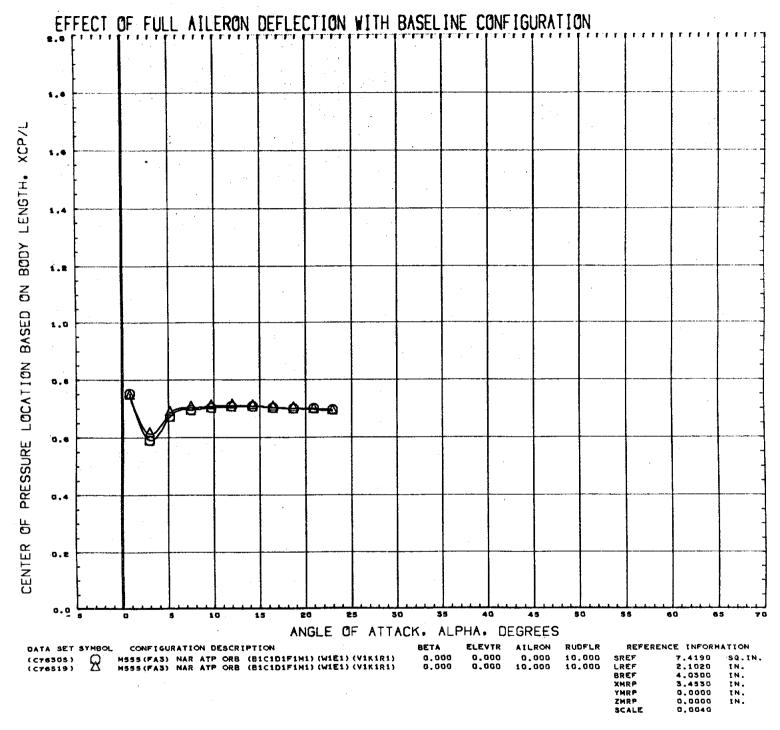




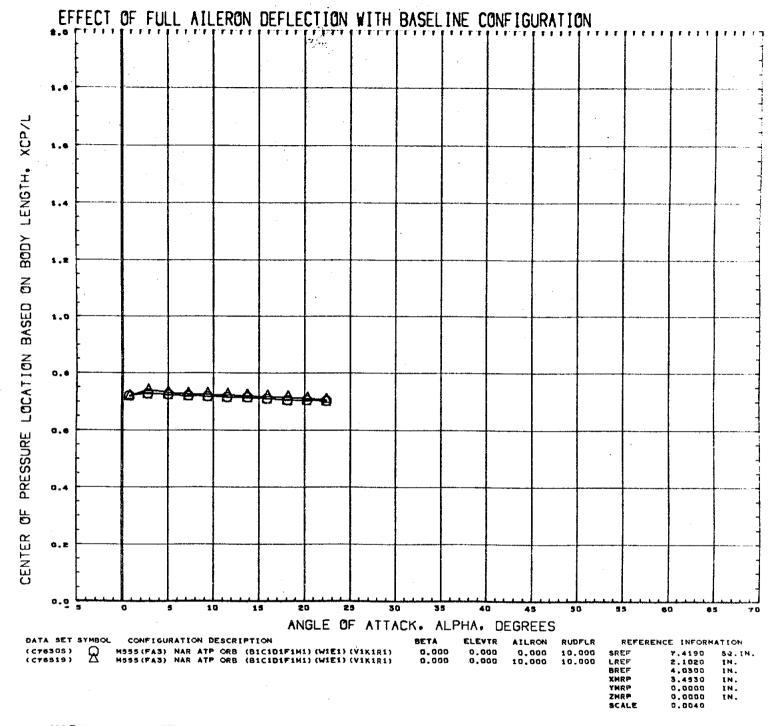
MACH .59



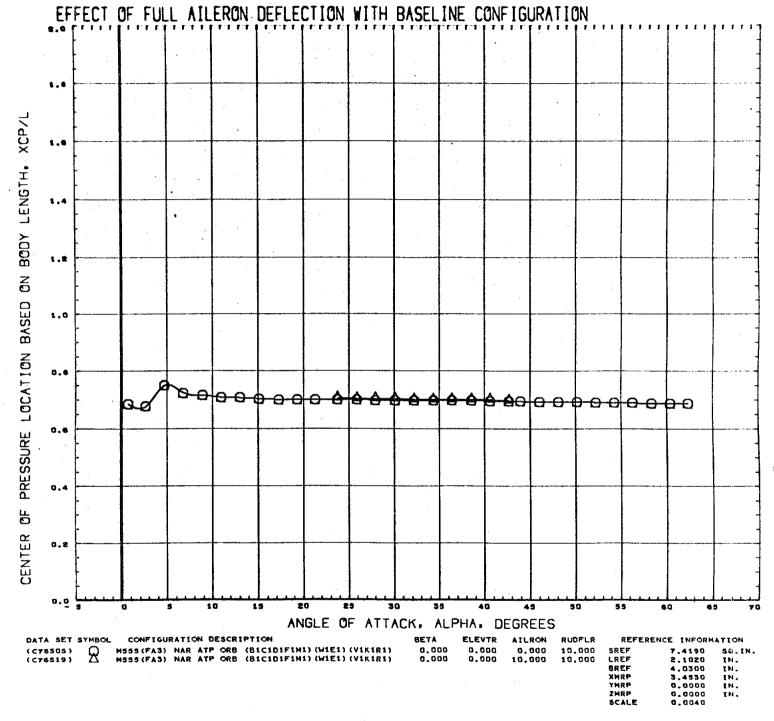
MACH .90



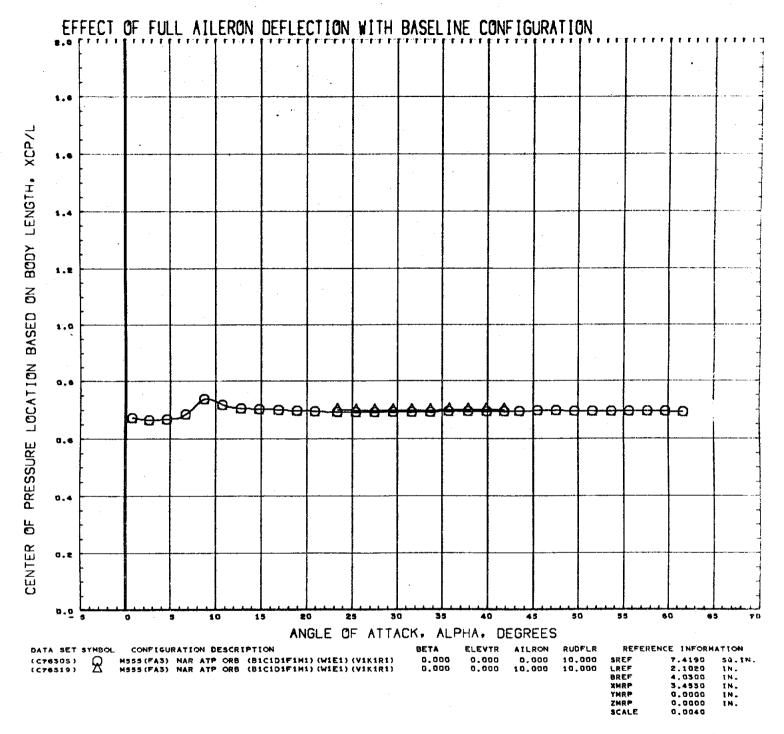
1.20



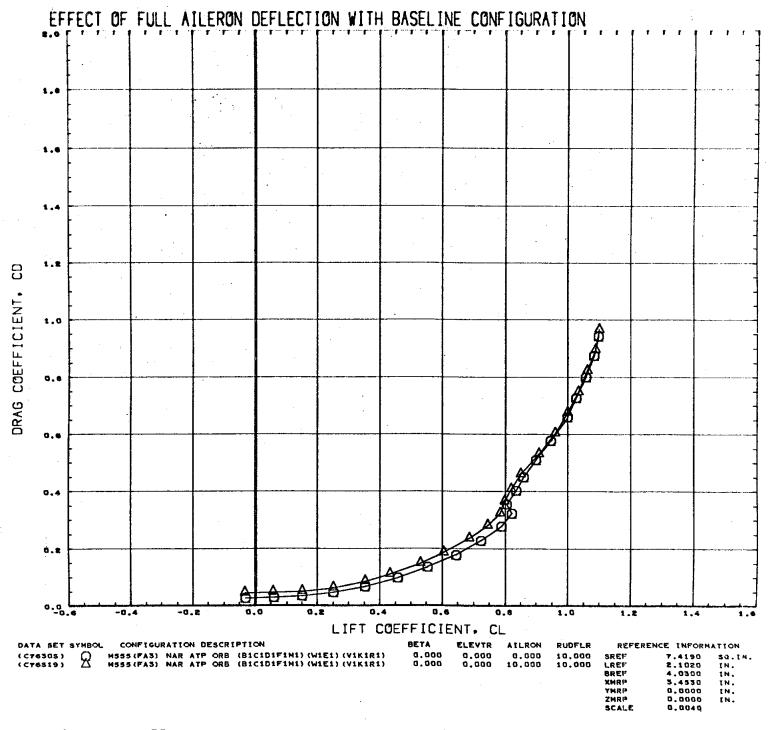
1.97



MACH 2.99



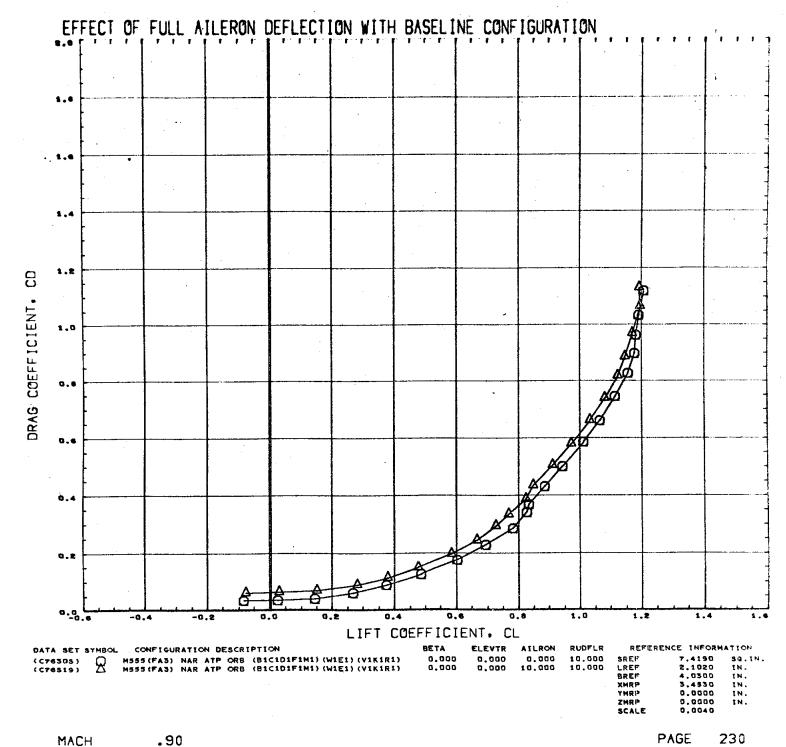
MACH 4.96

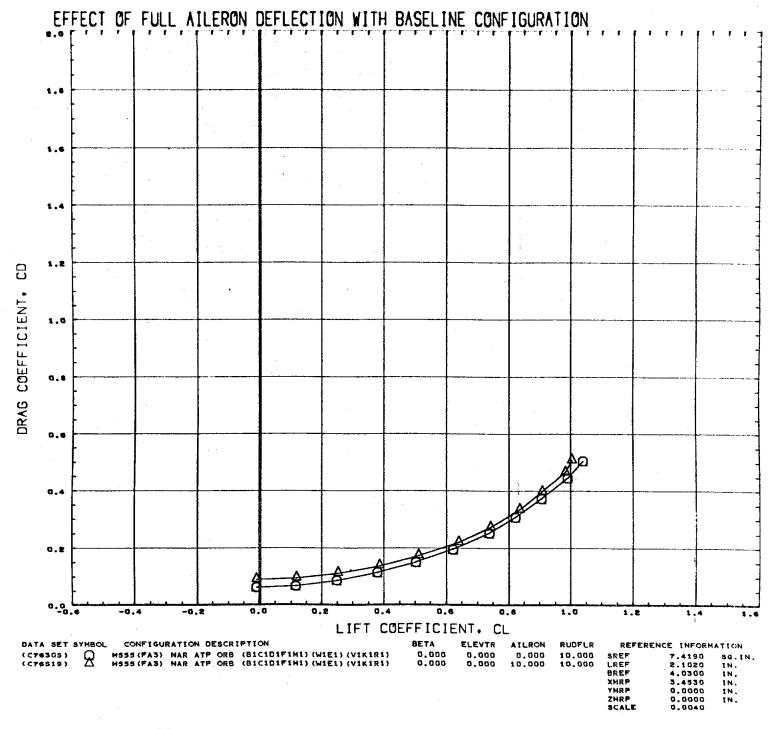


.59

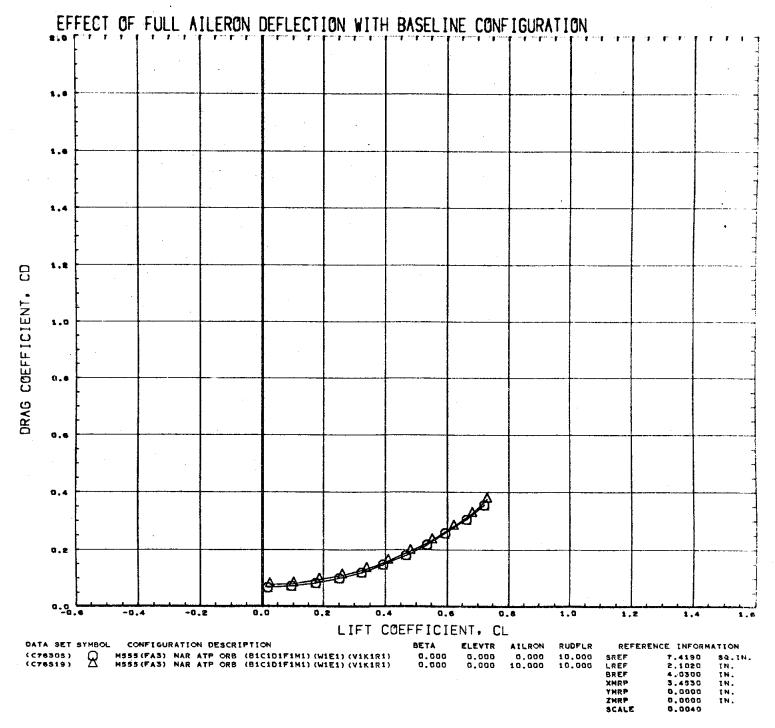
PAGE

229

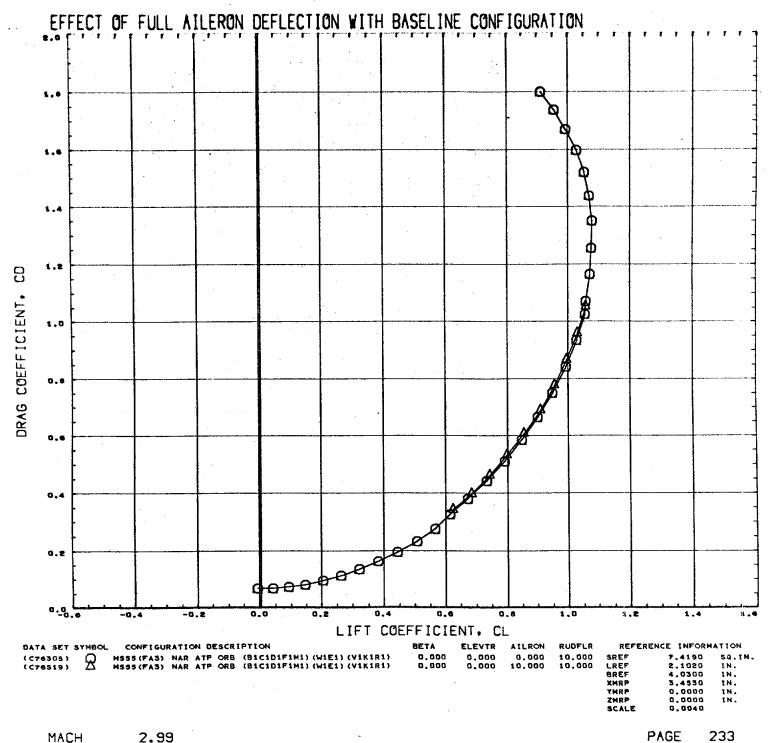


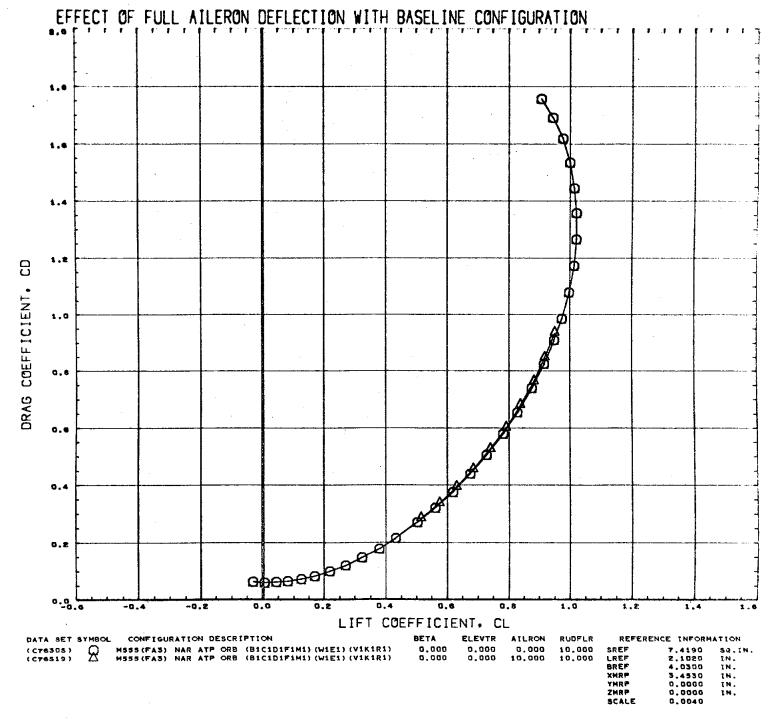


MACH 1.20

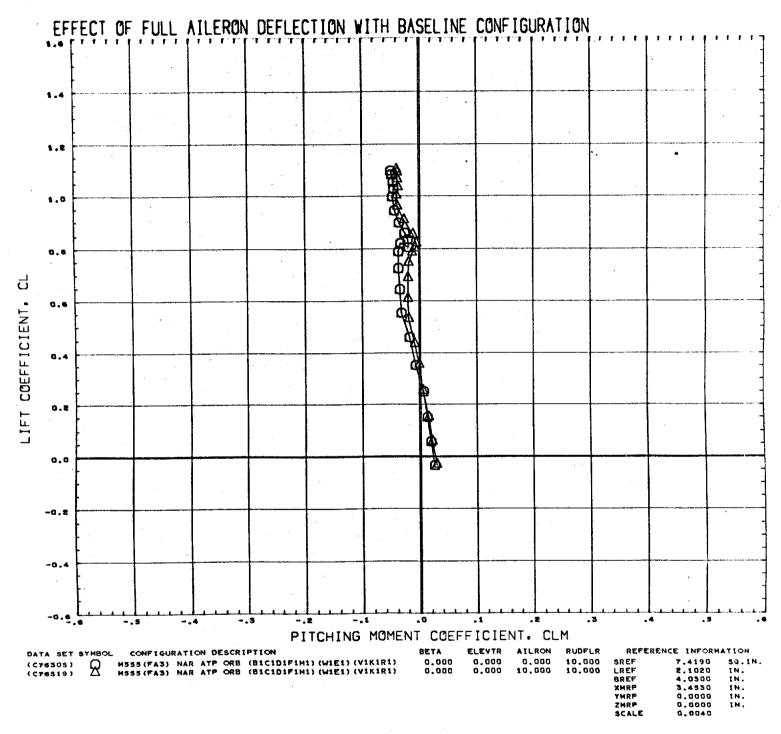


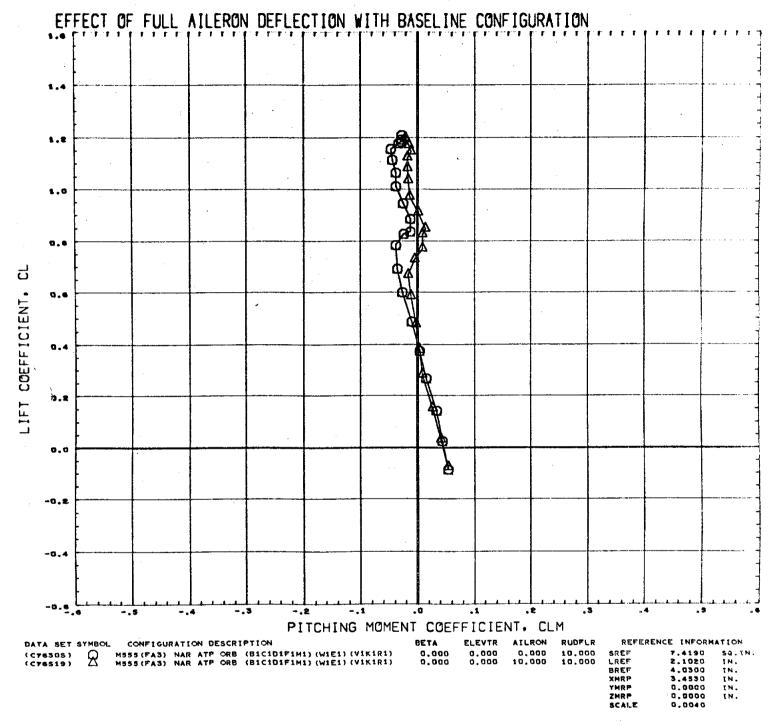
MACH 1.97



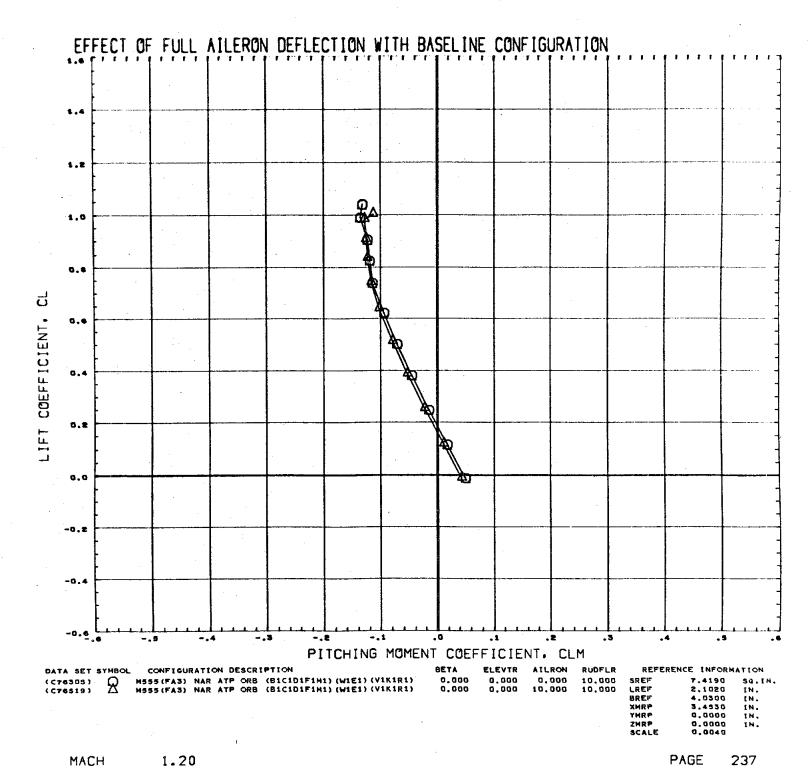


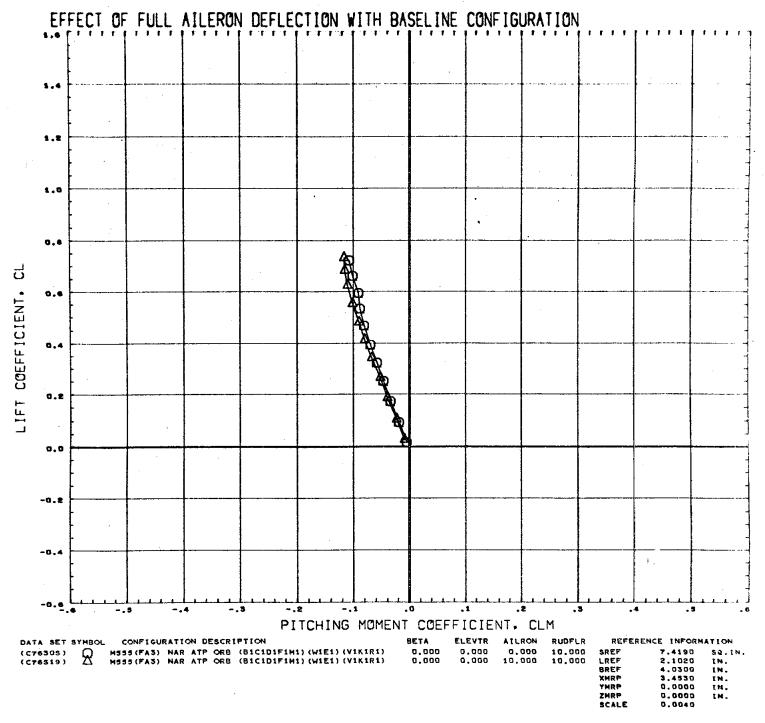
4.96



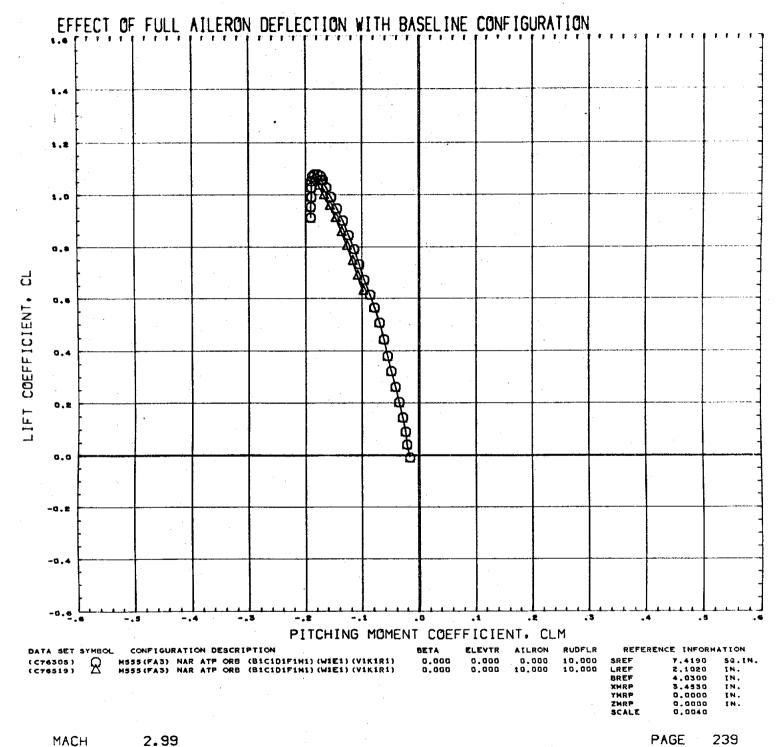


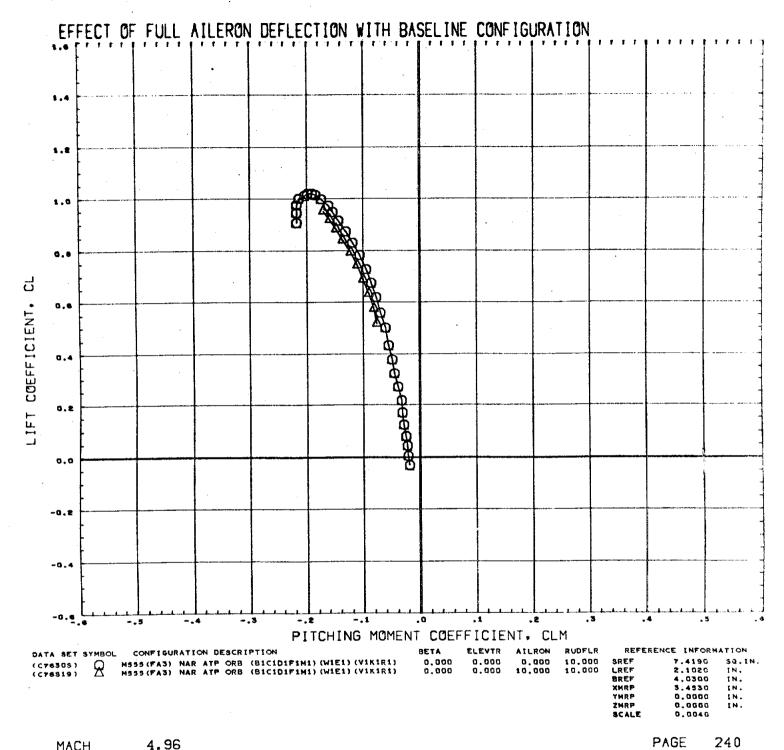
.90

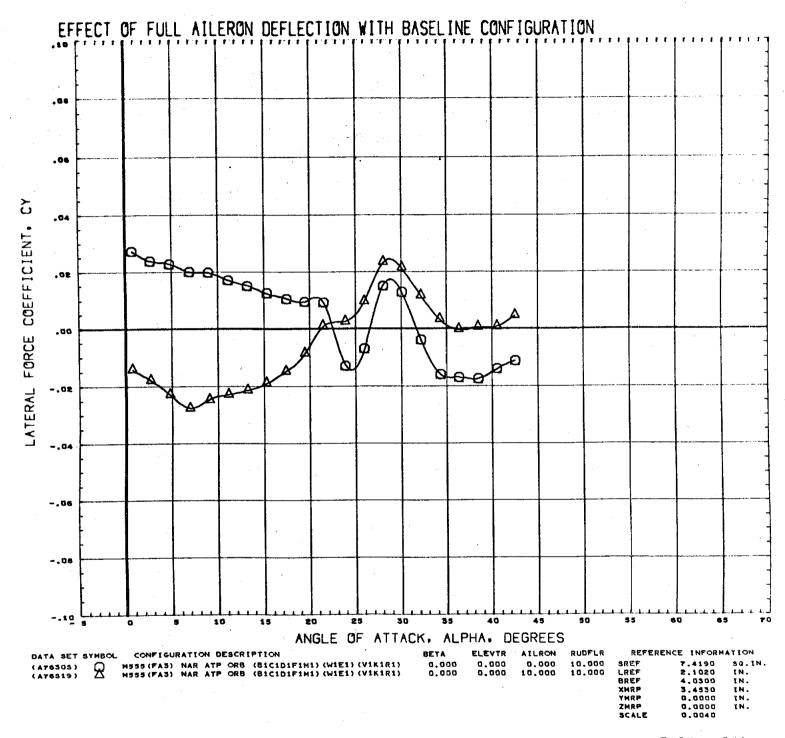


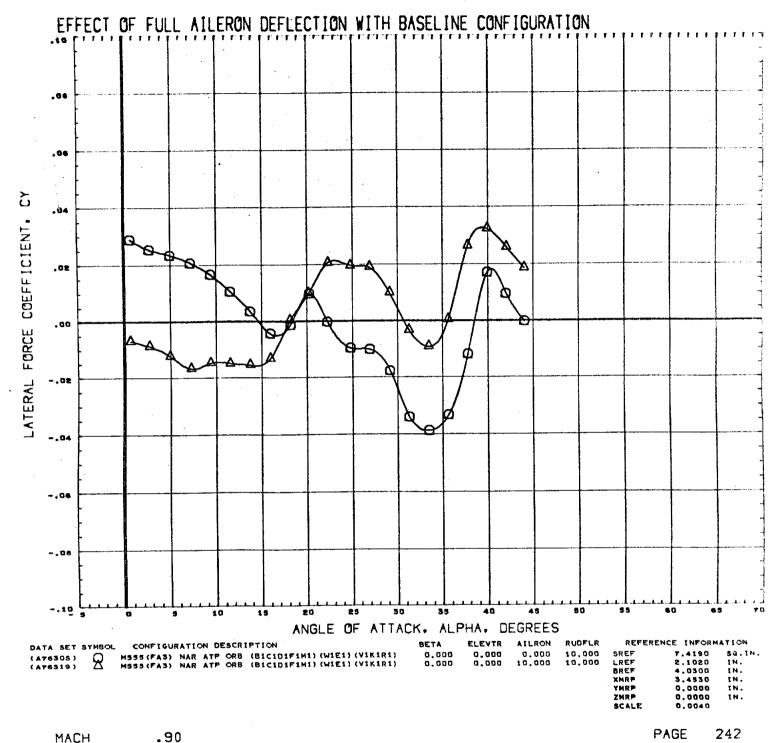


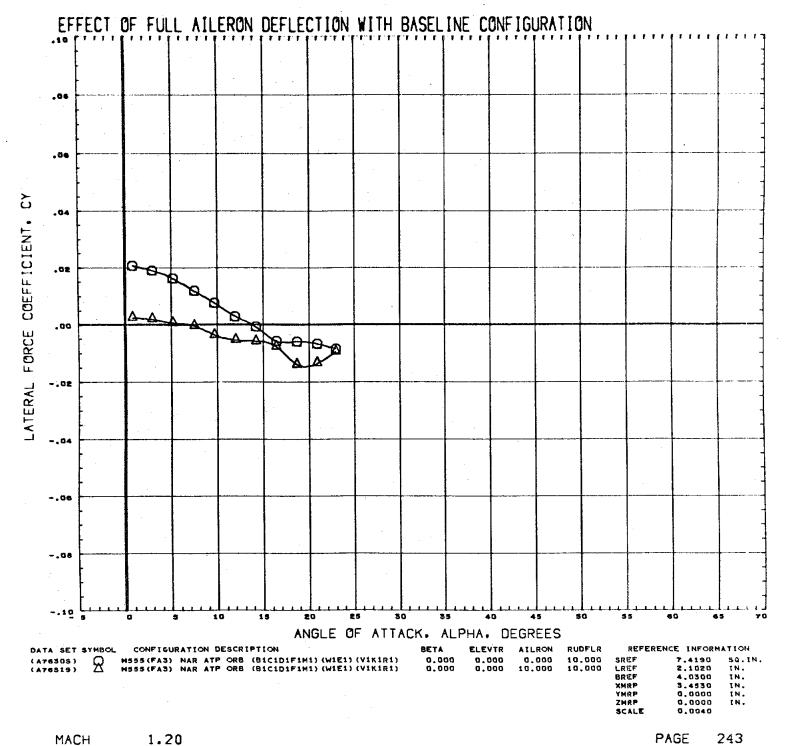
1.97





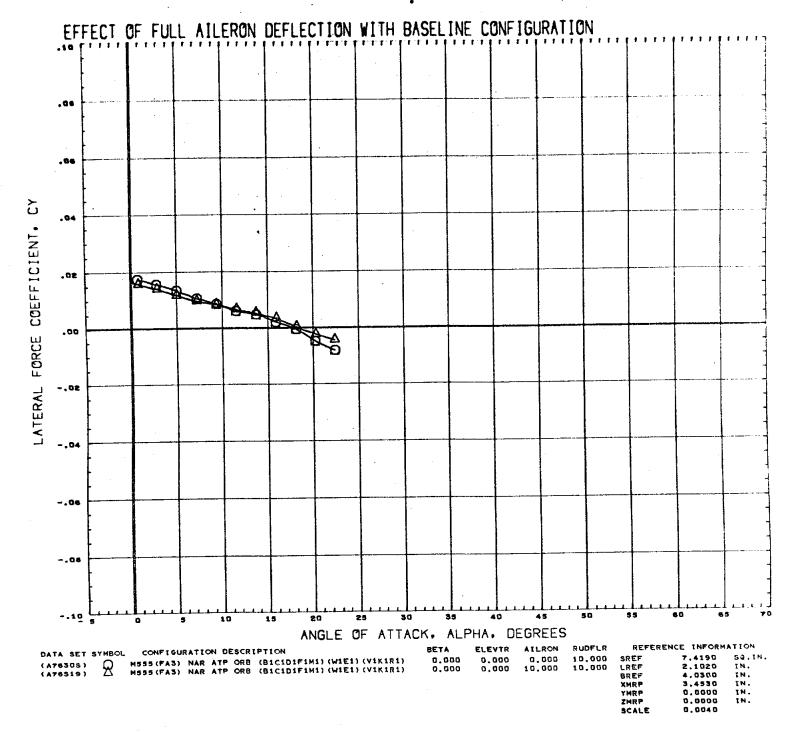




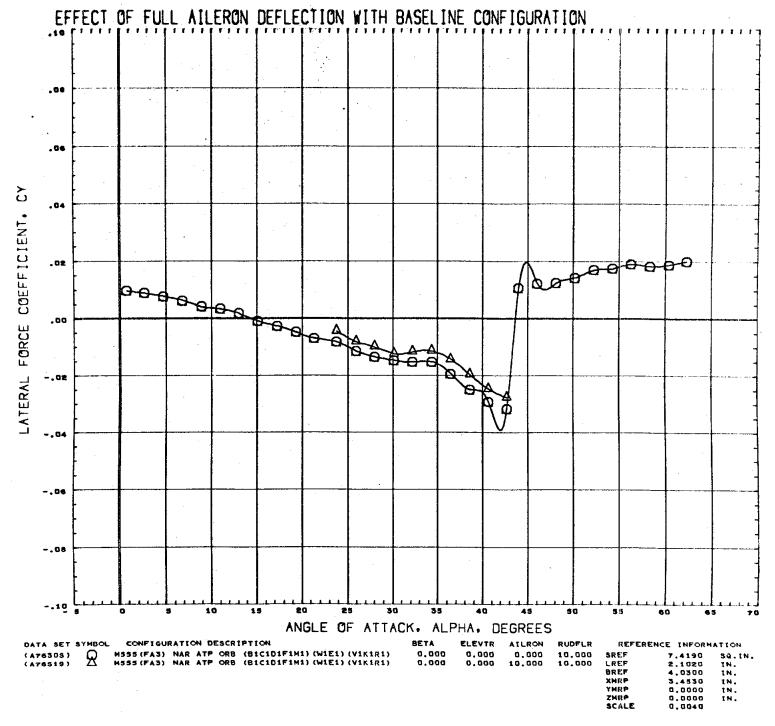


243

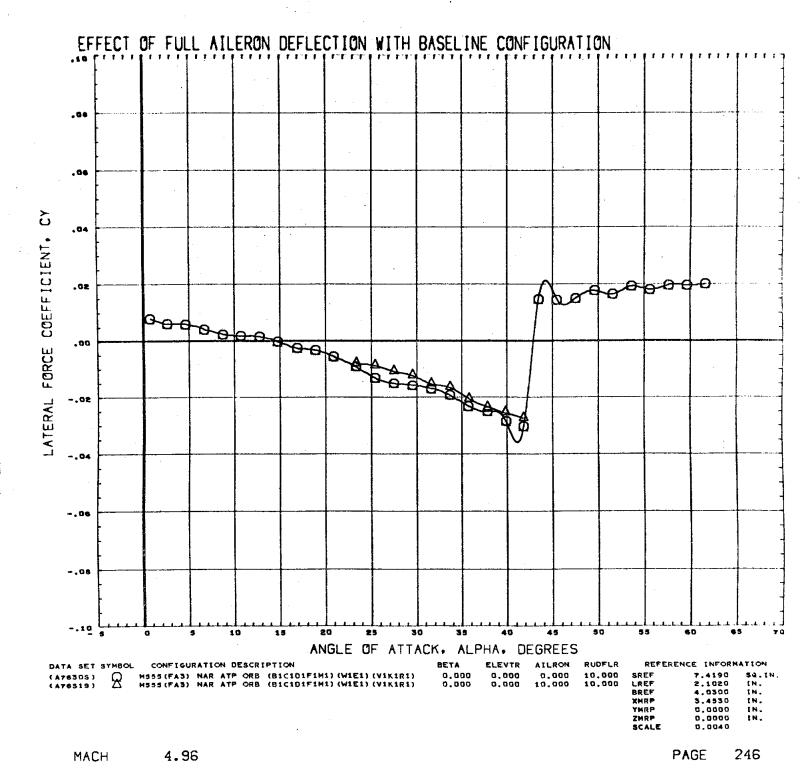
1.20

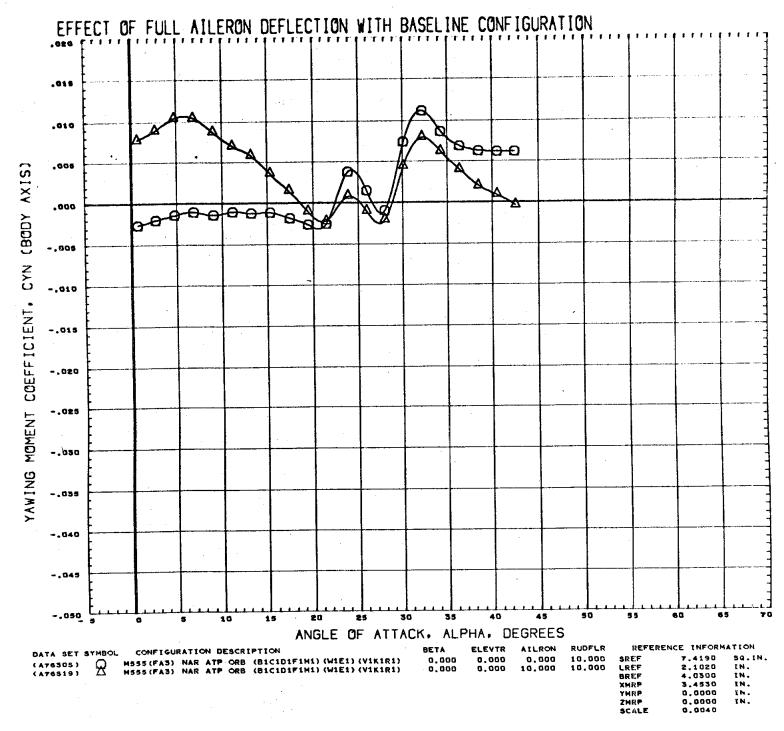


MACH 1.97

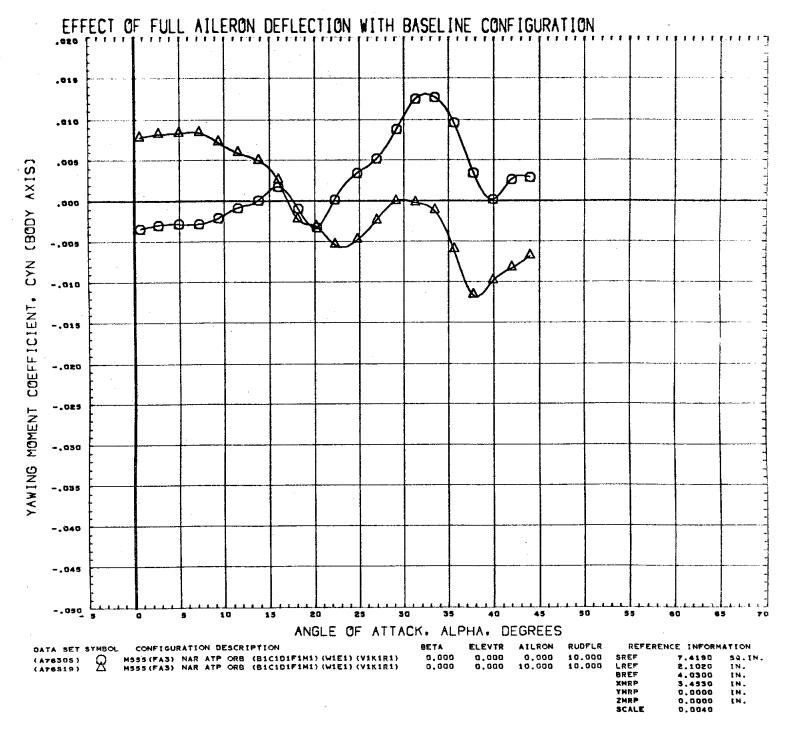


MACH 2.99

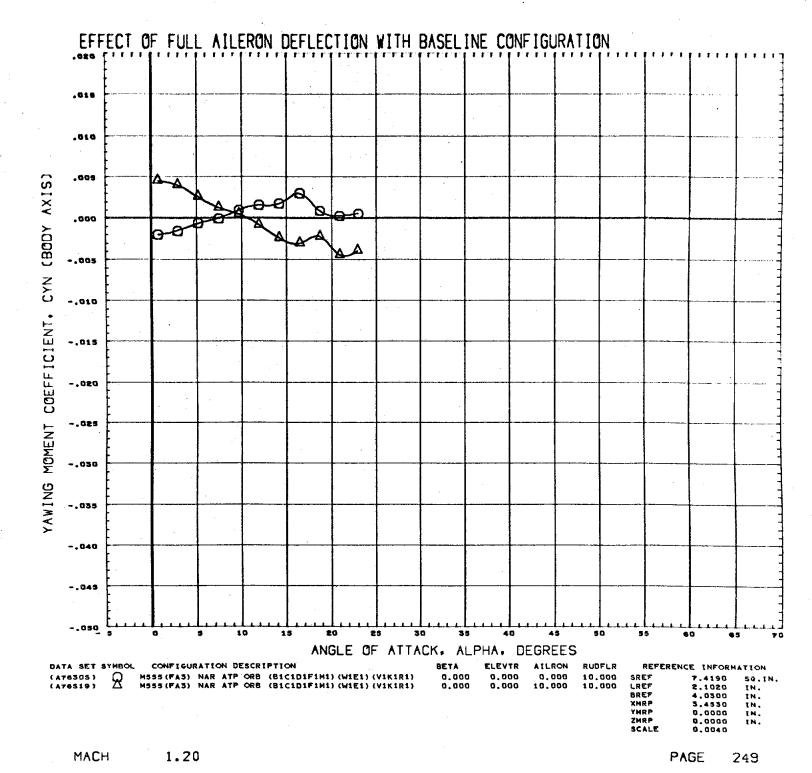


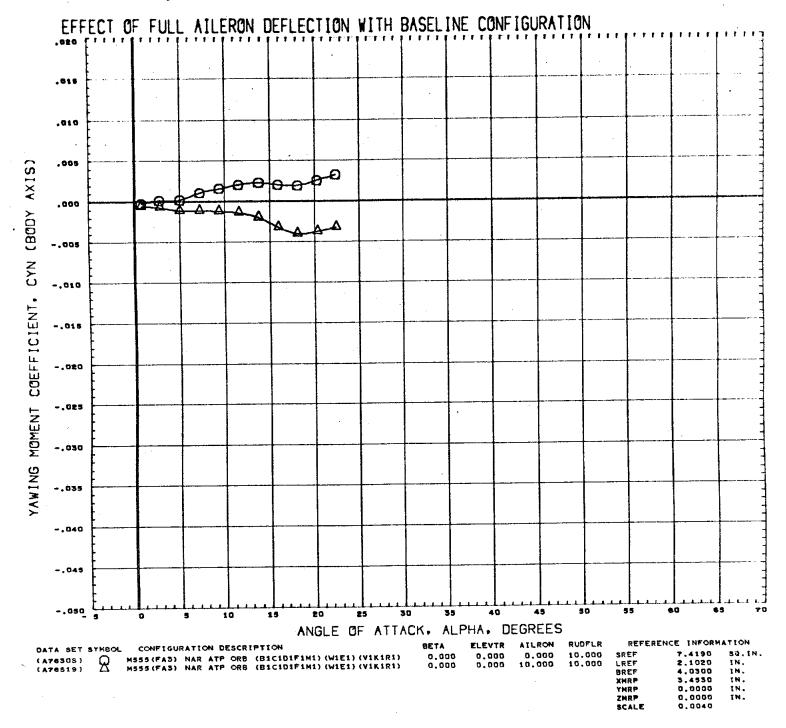


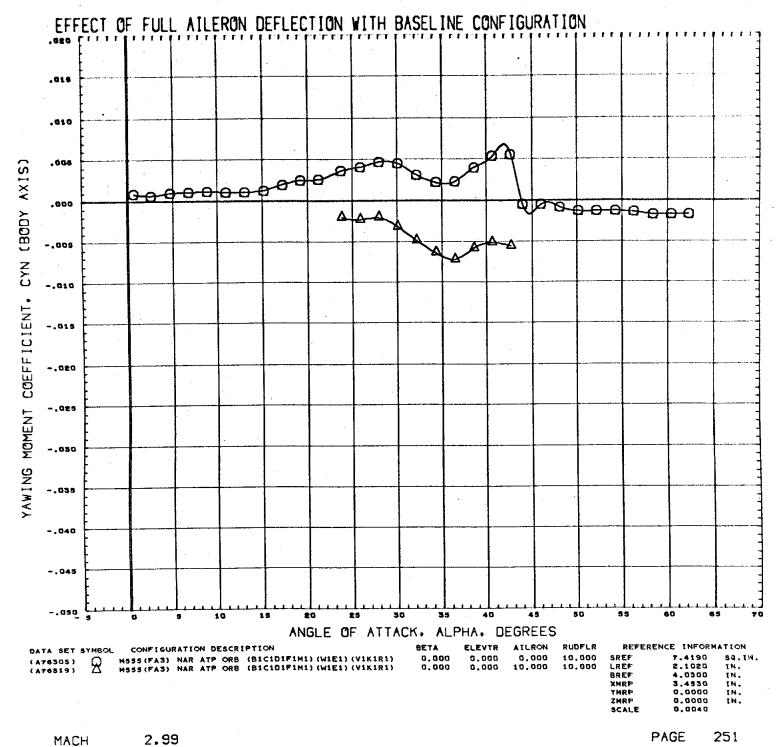
. MACH .59

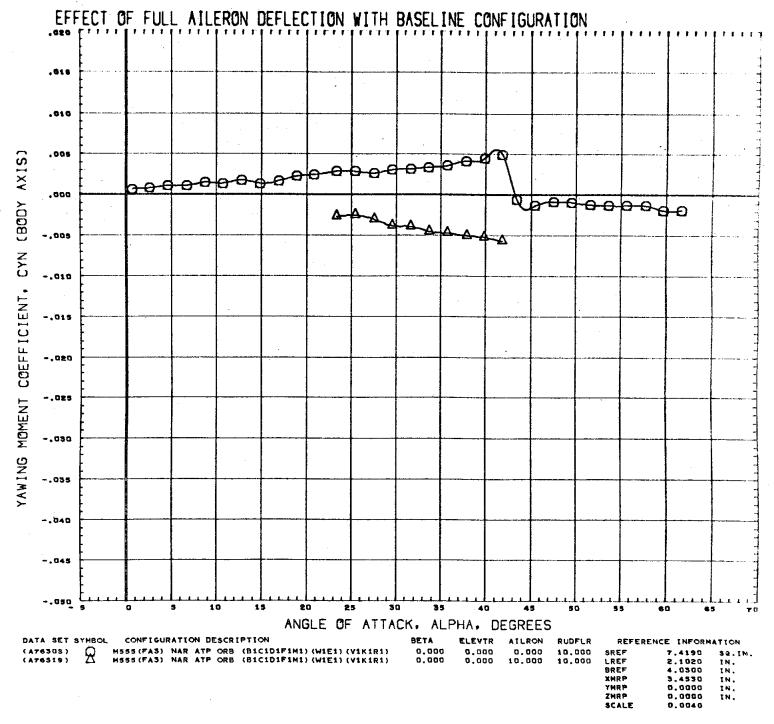


.90





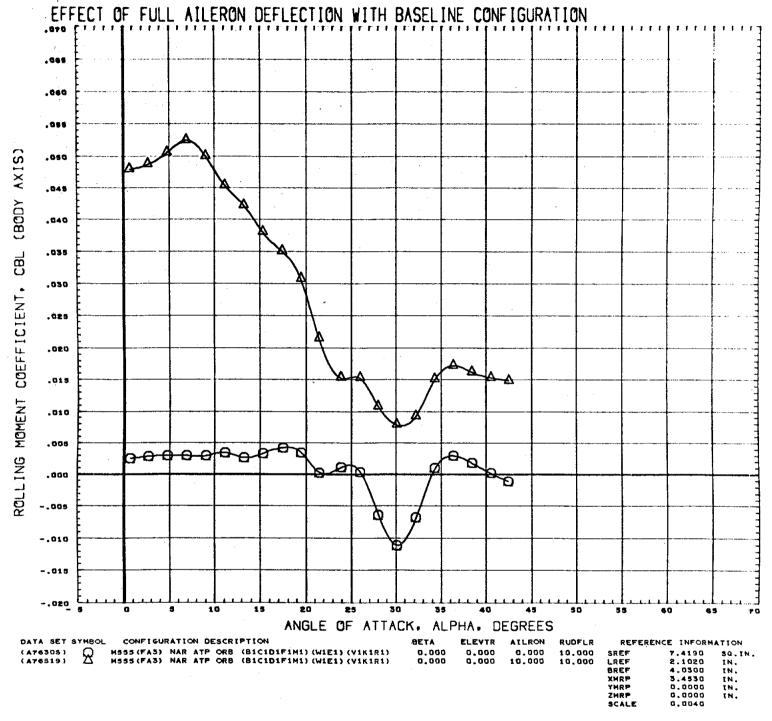




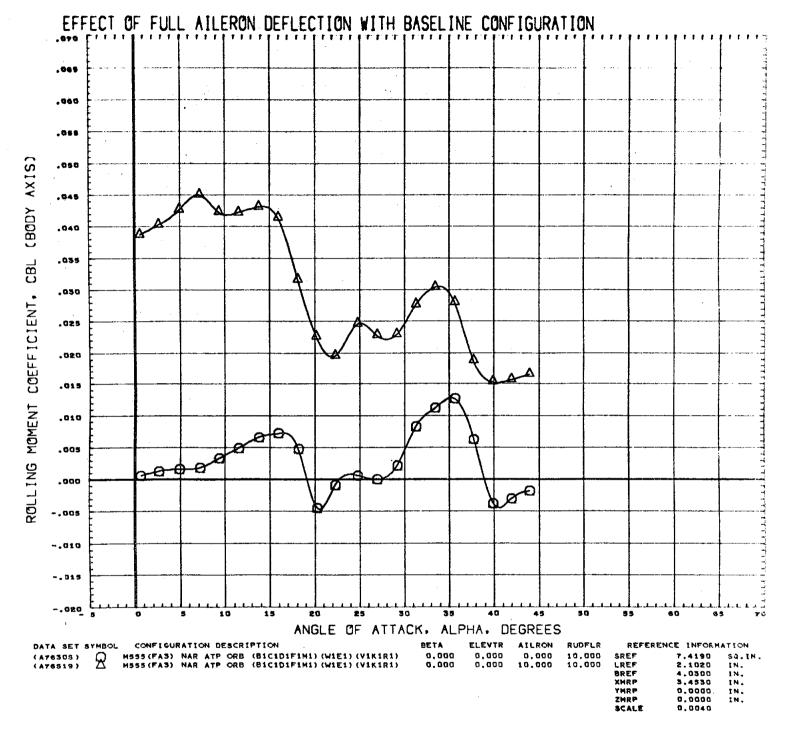
MACH 4.96

PAGE

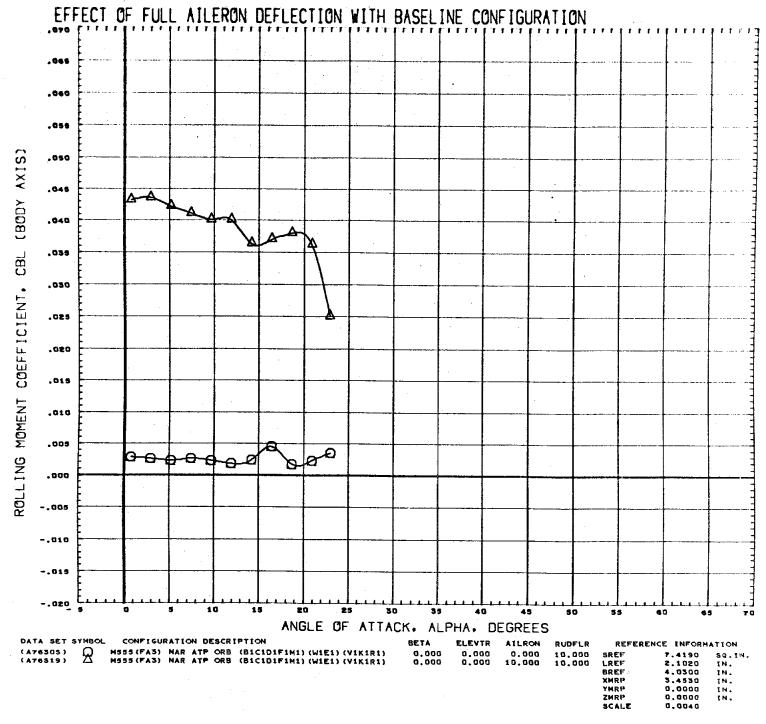
252

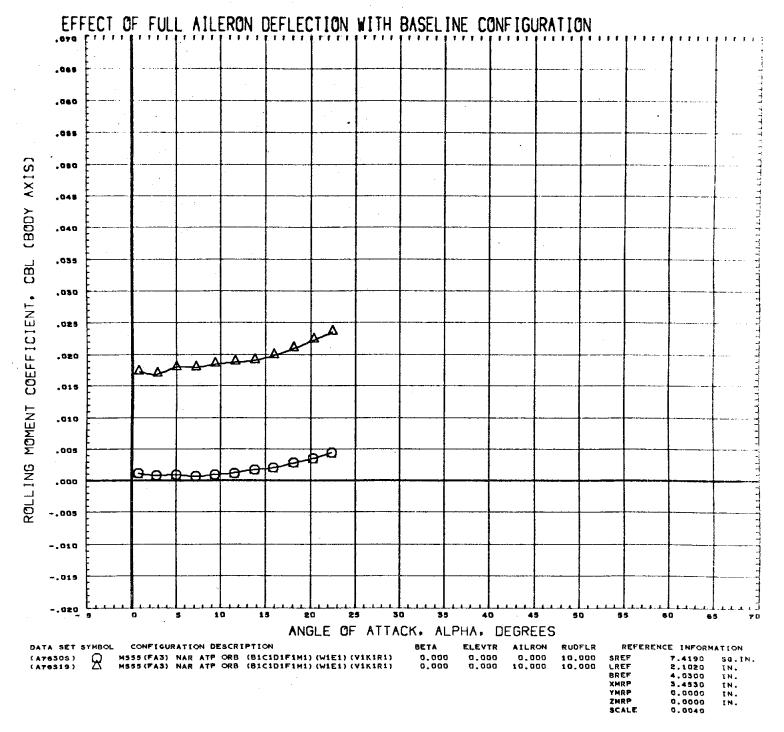


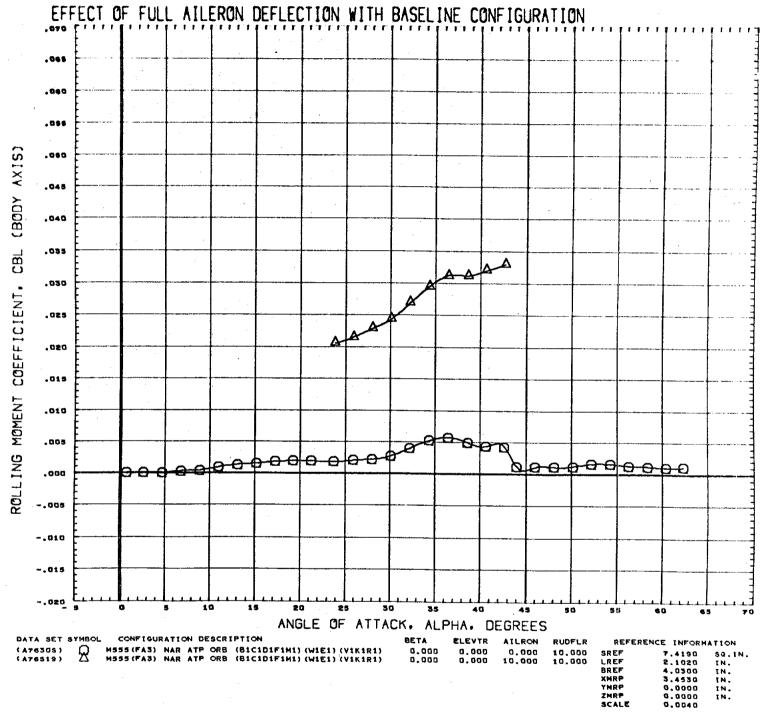
.59



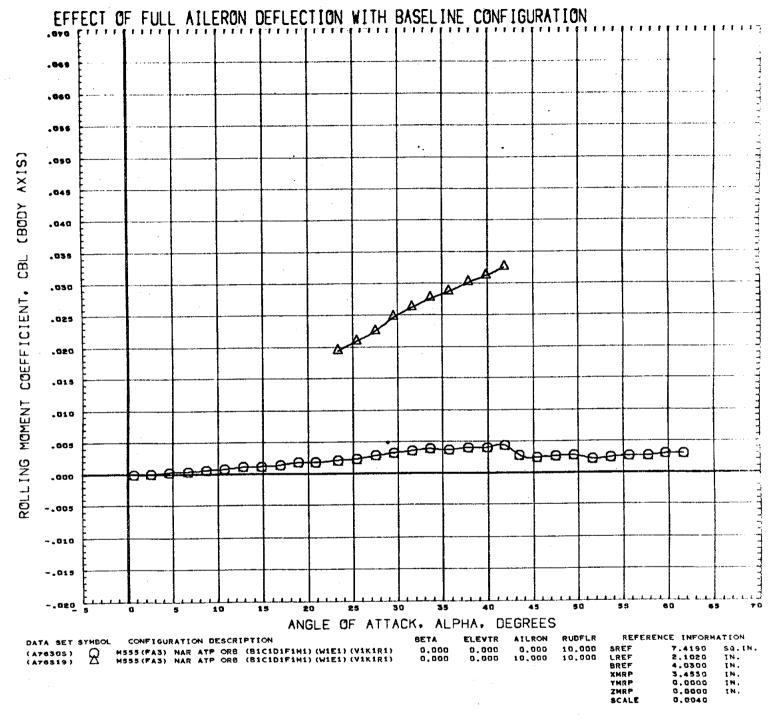
MACH .90





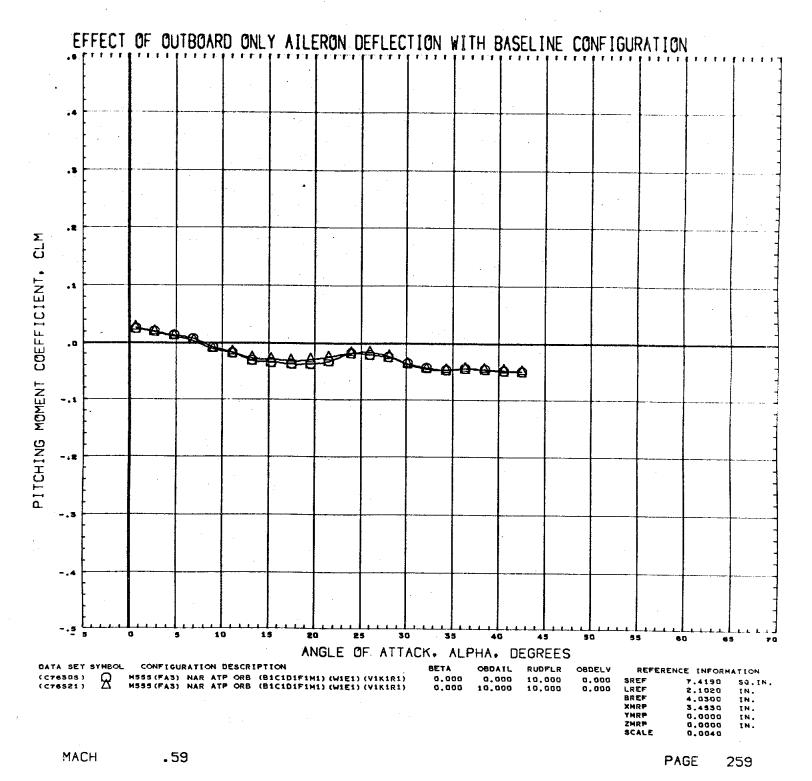


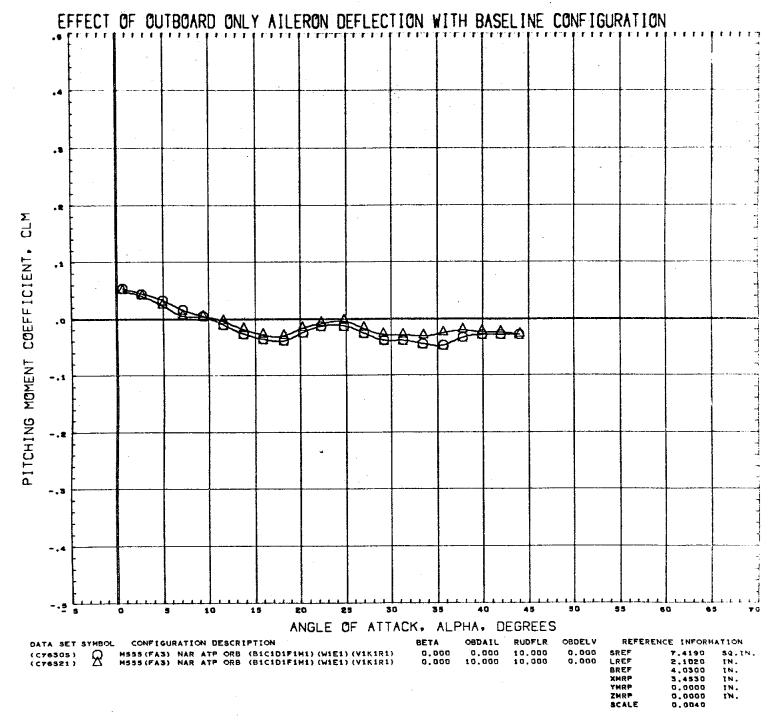
MACH 2.99



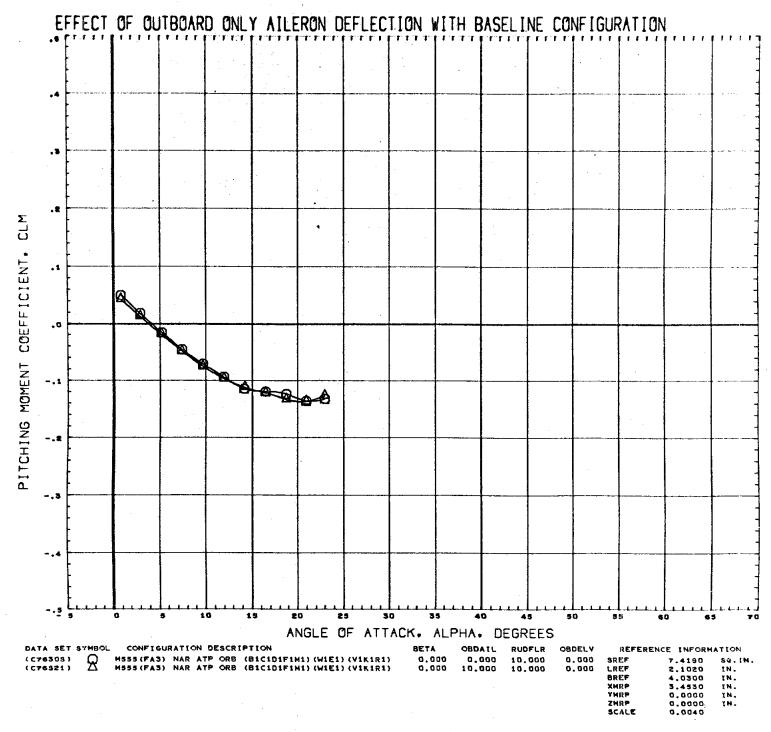
4.96

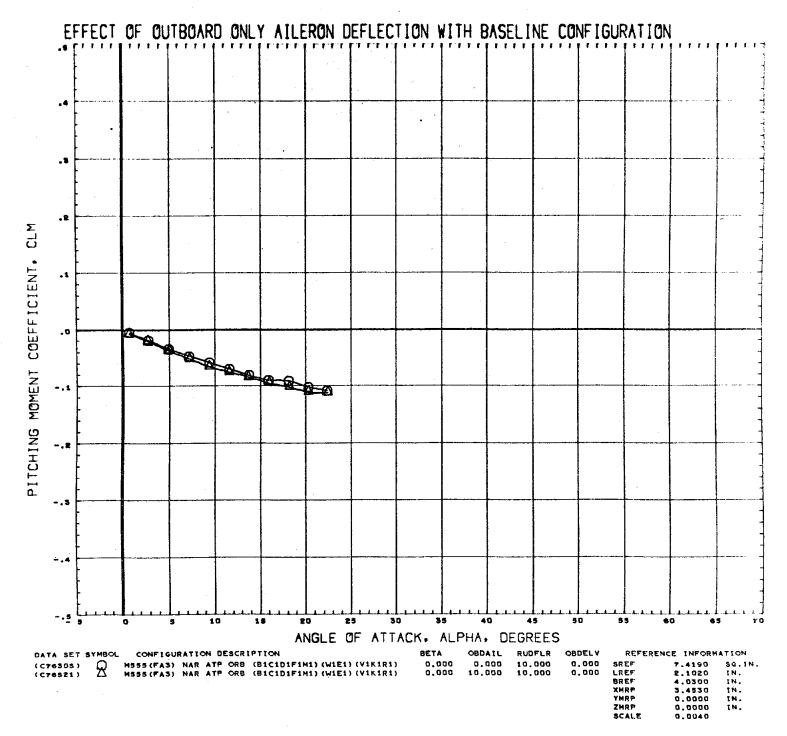
MACH



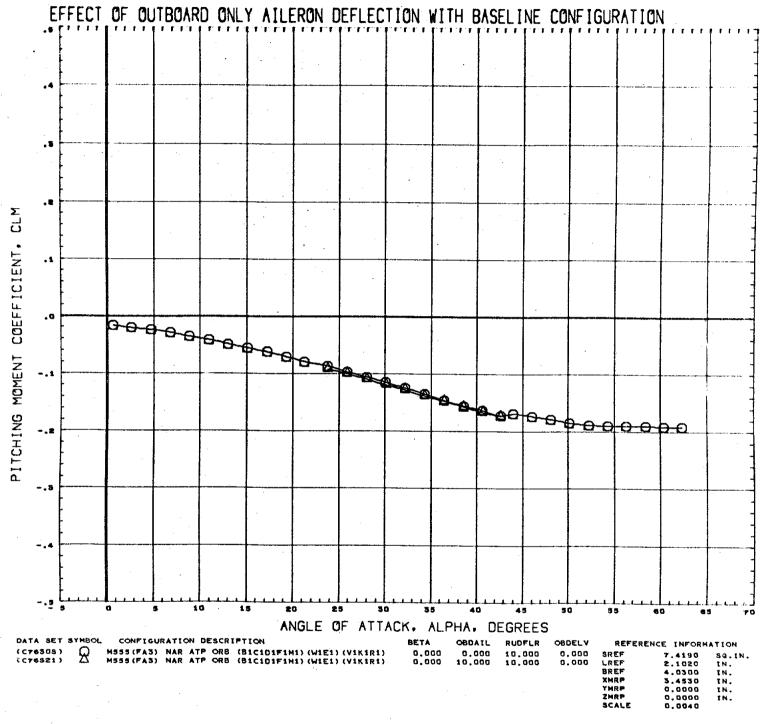


.90

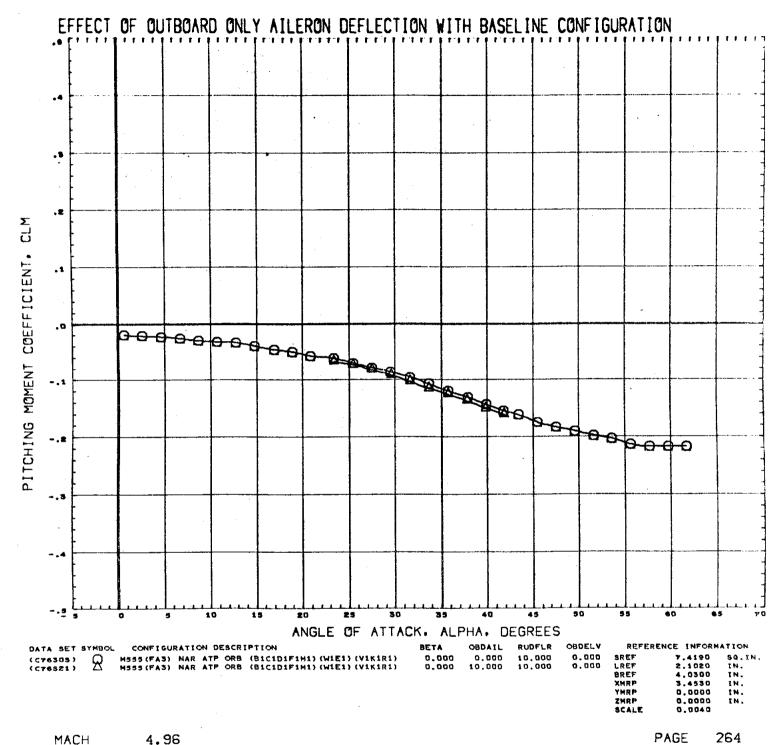


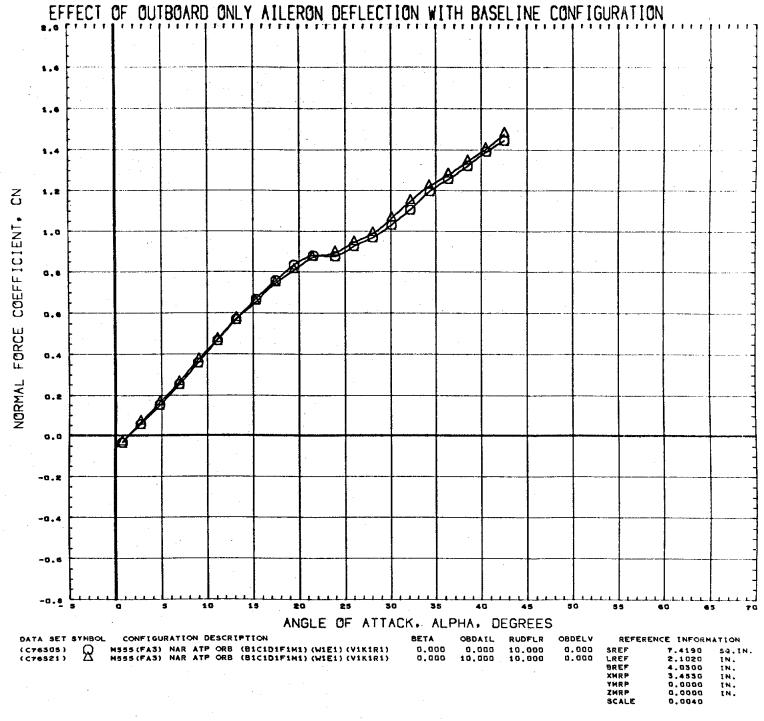


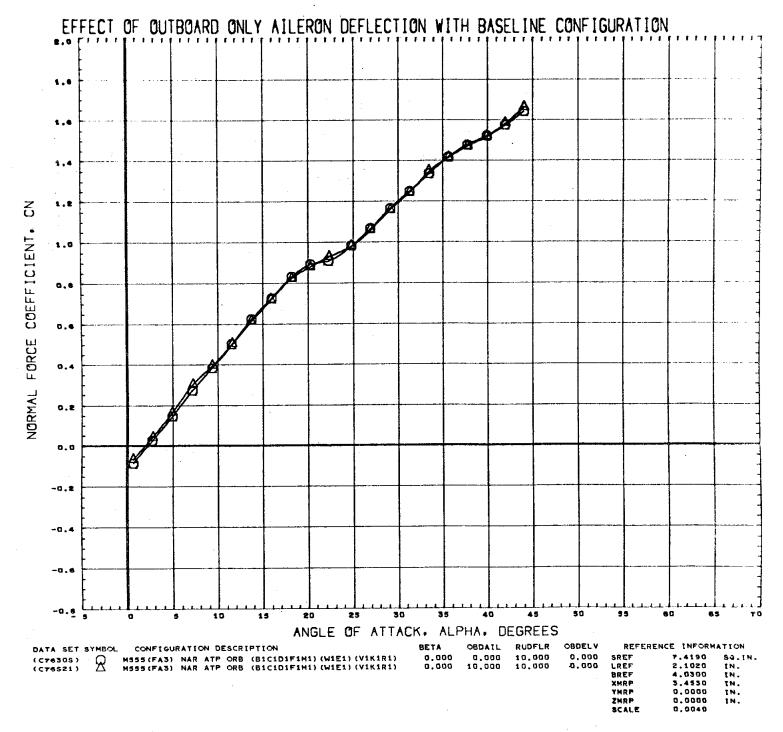
1.97



MACH 2.99

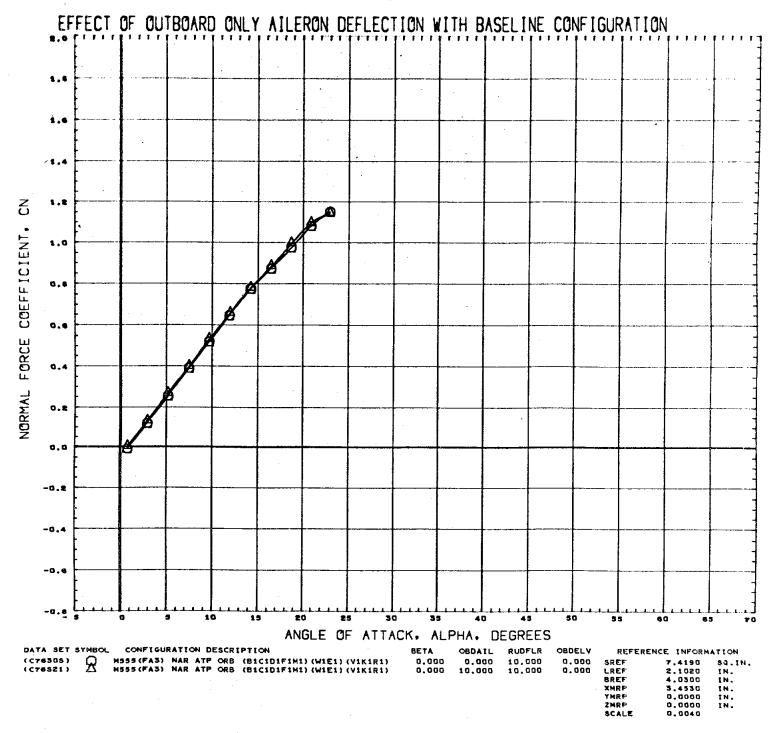


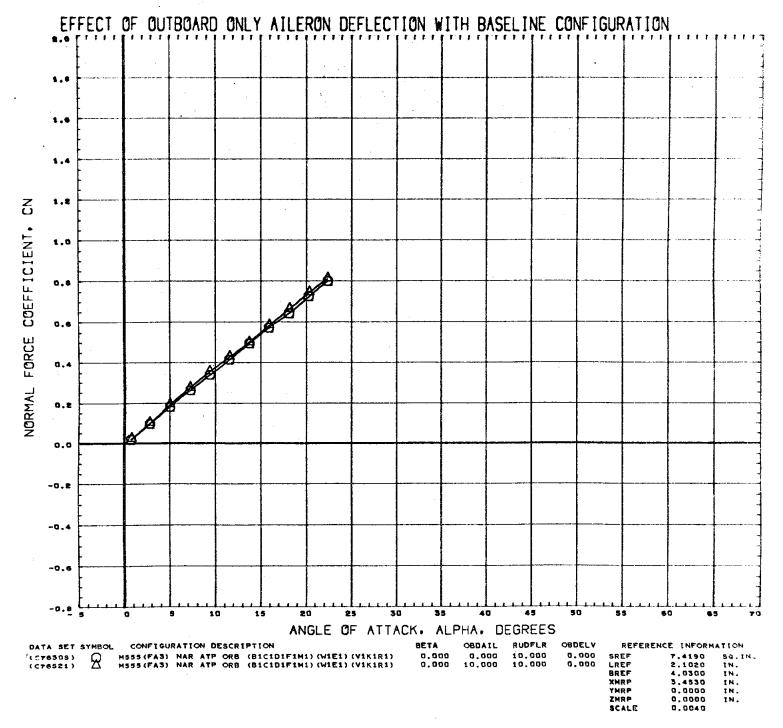




.90

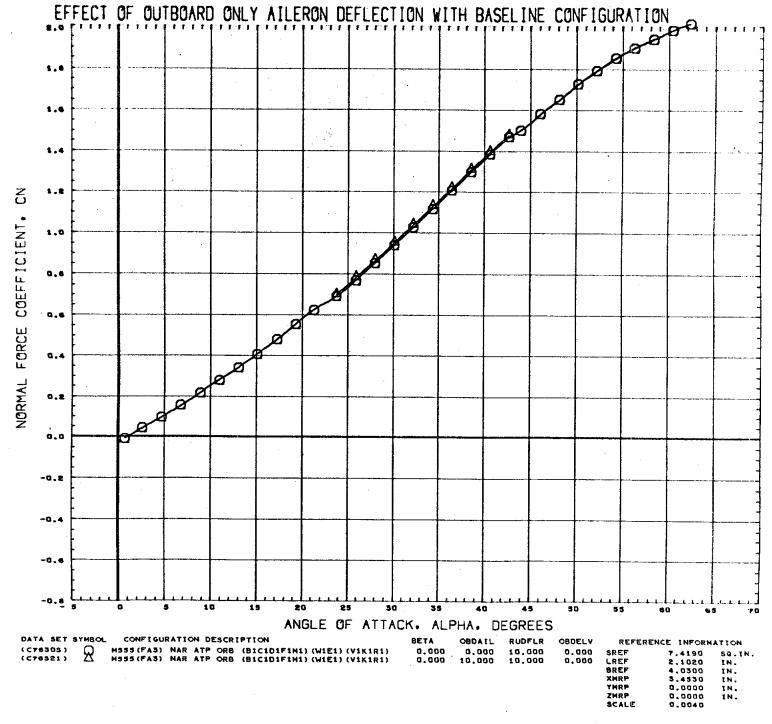
MACH



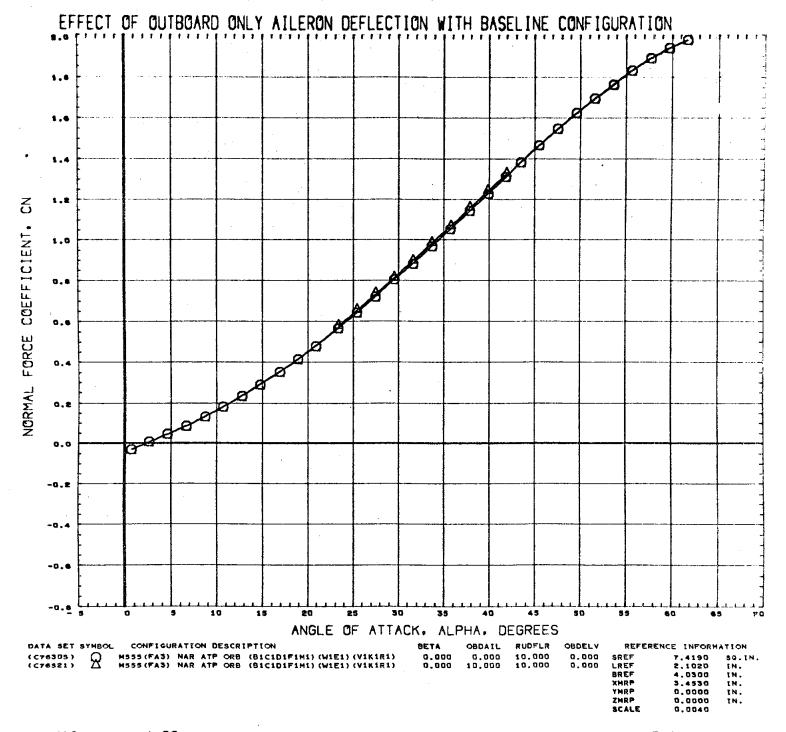


1.97

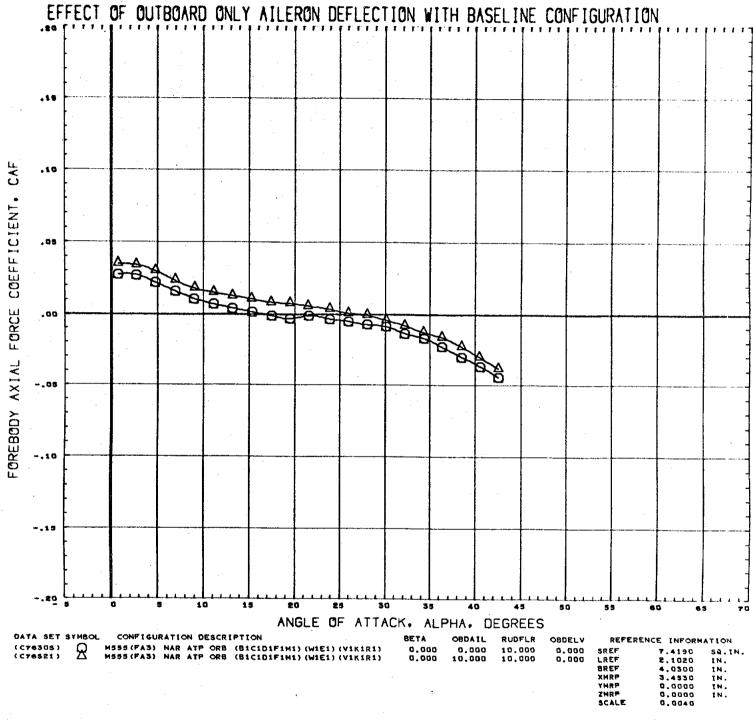
MACH

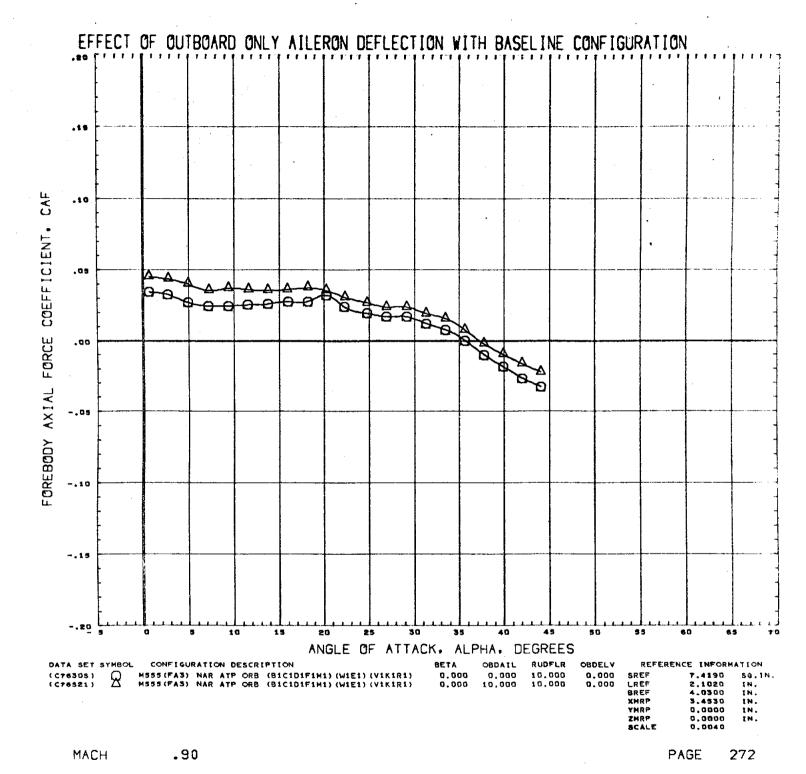


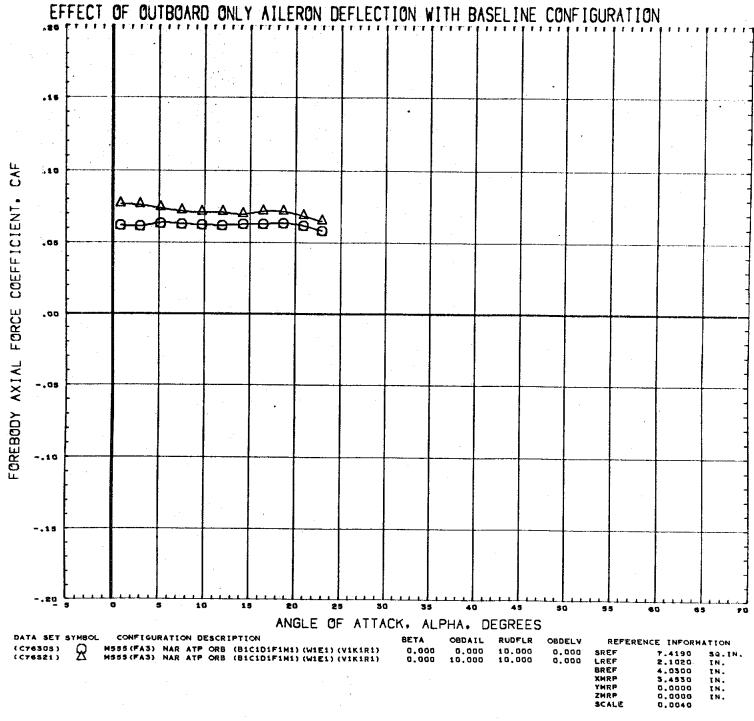
2.99

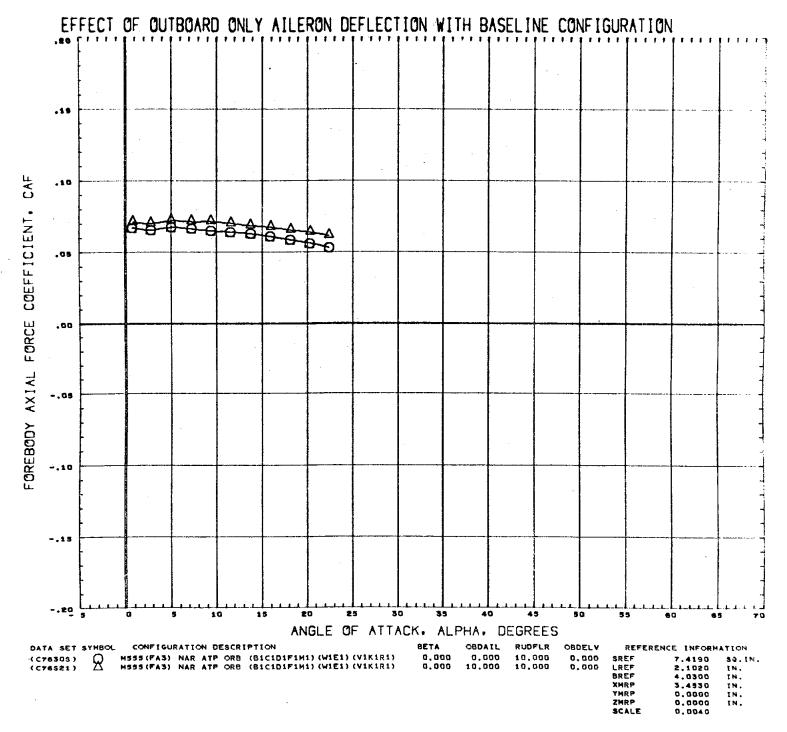


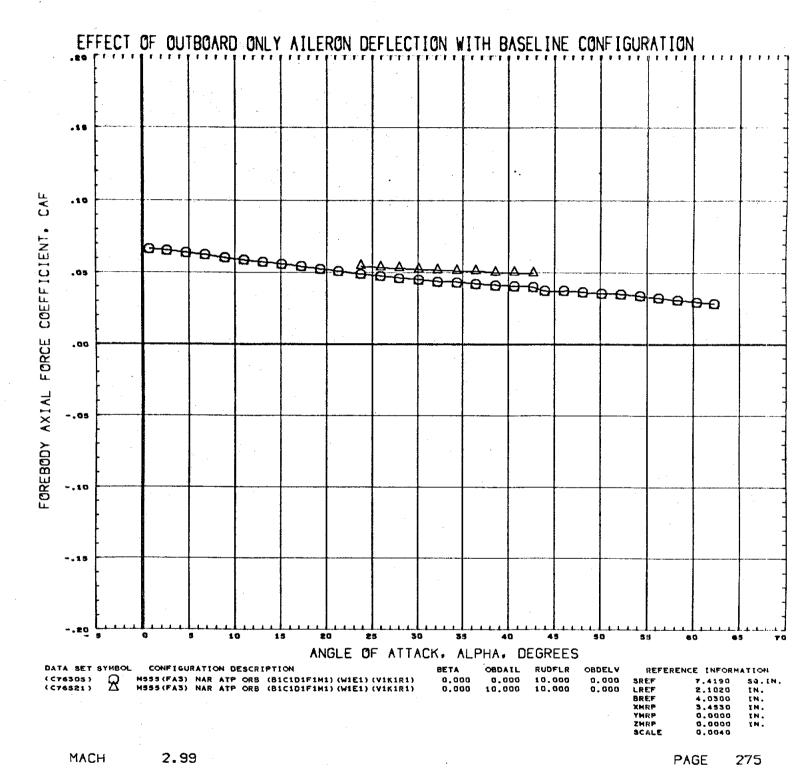
MACH 4.96

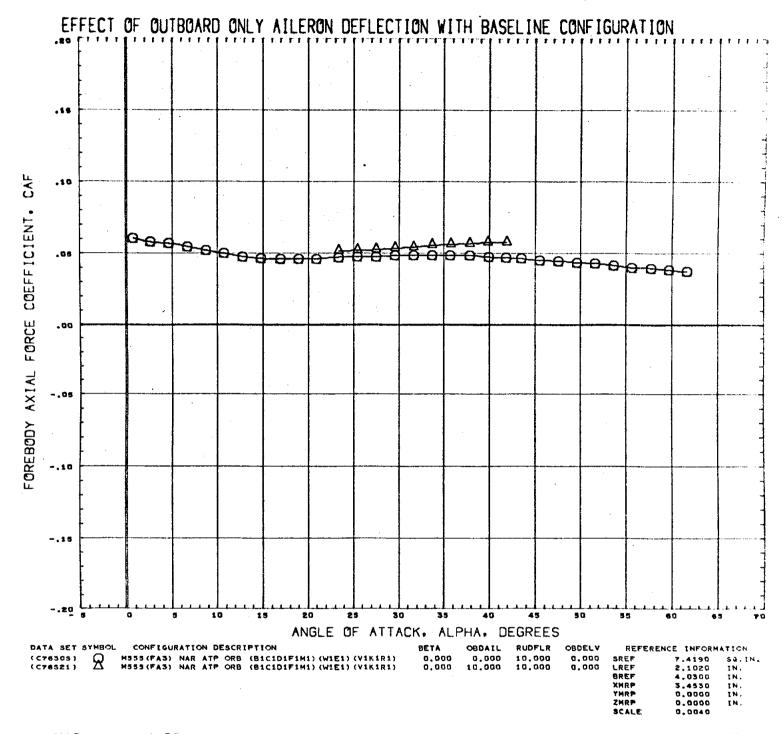




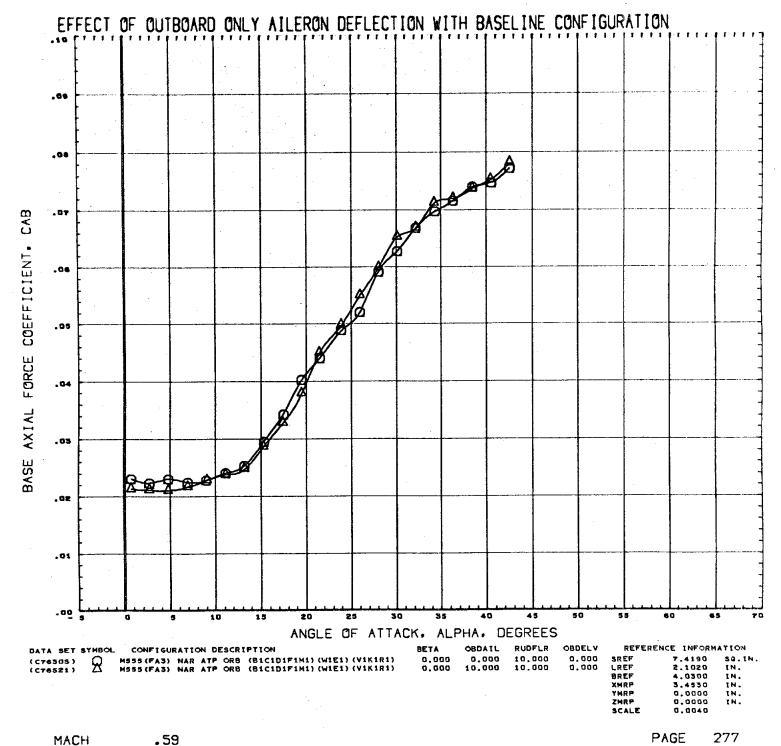


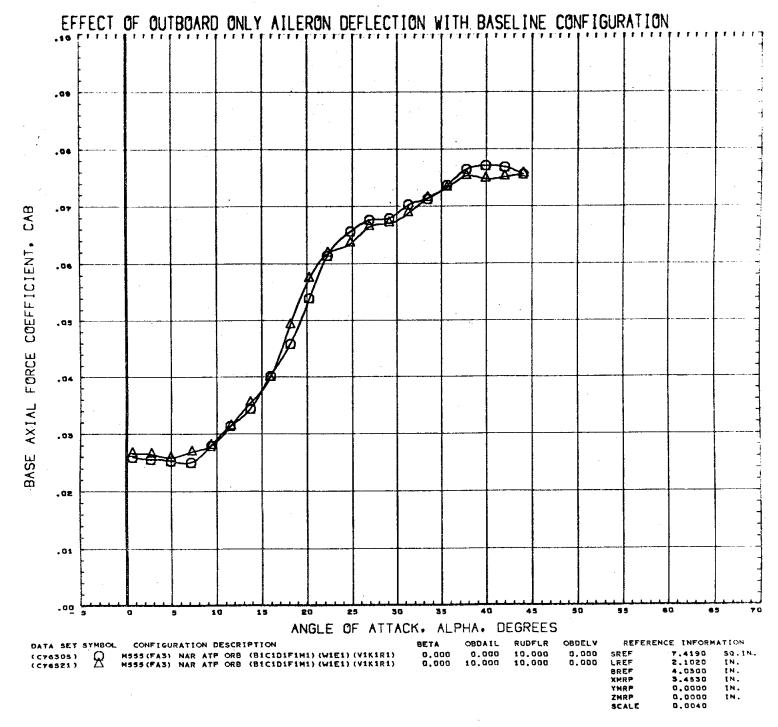




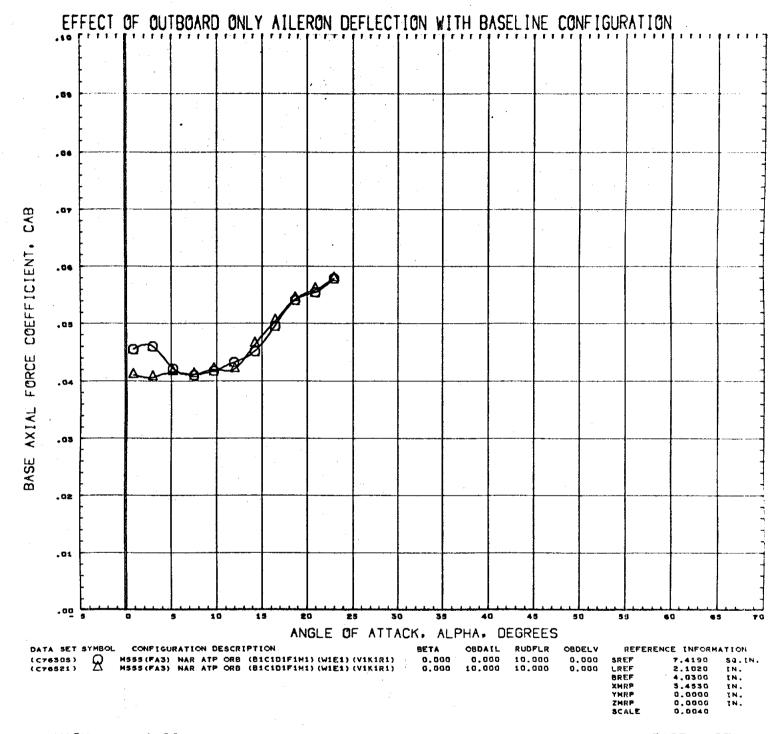


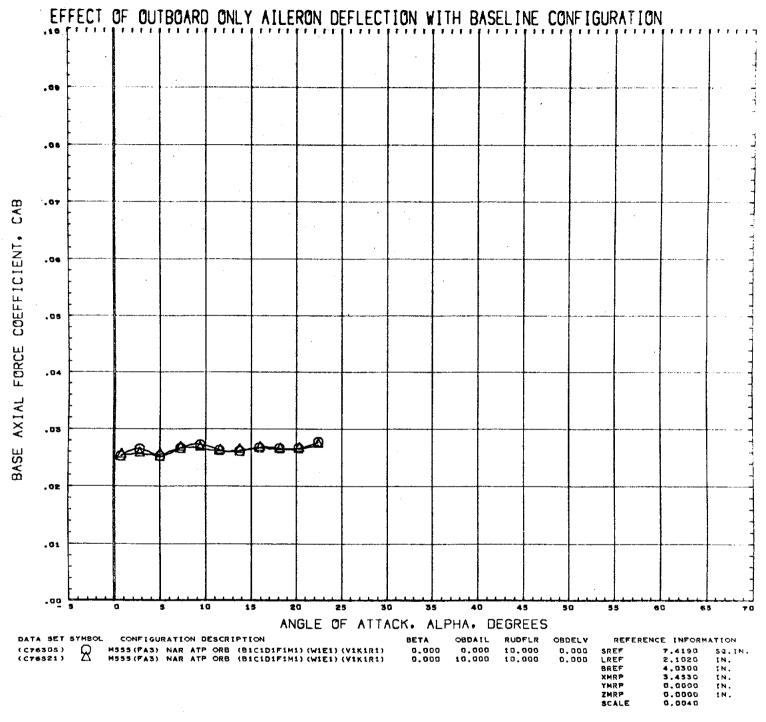
MACH 4.96



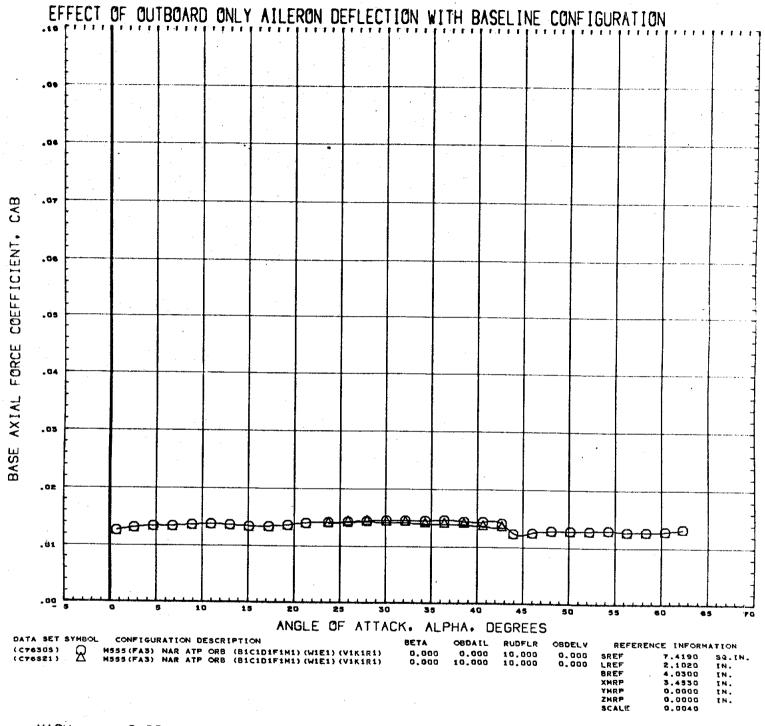


.90

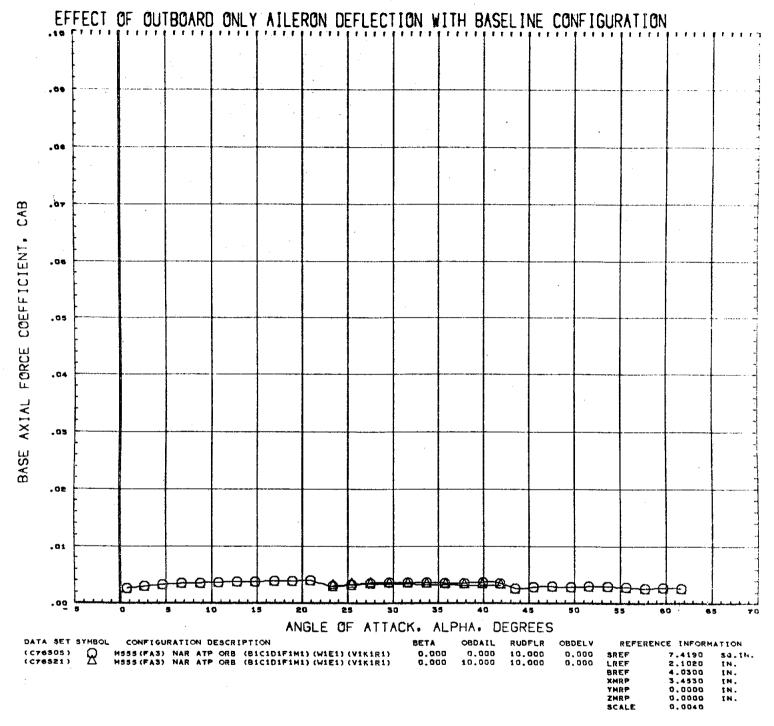




1.97



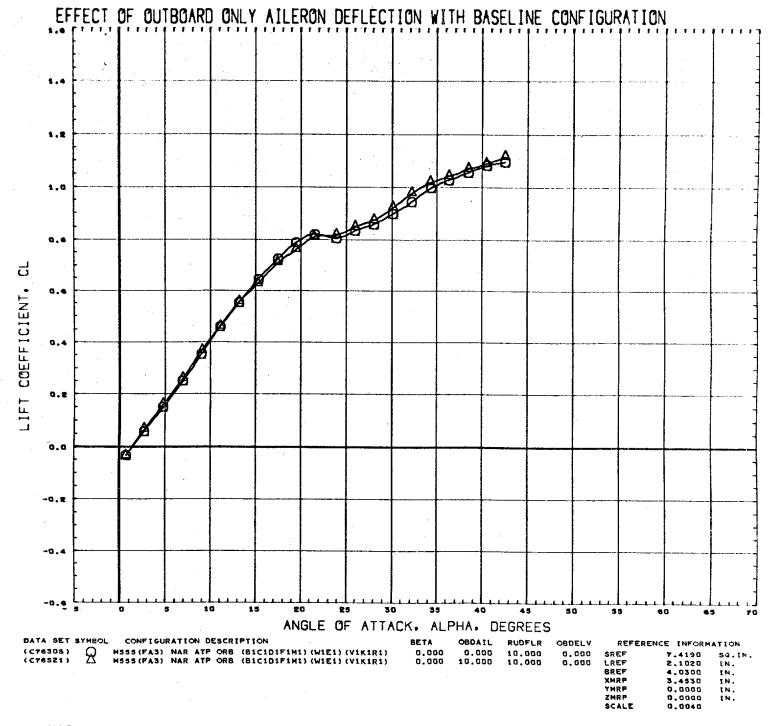
MACH 2.99



4.96

PAGE

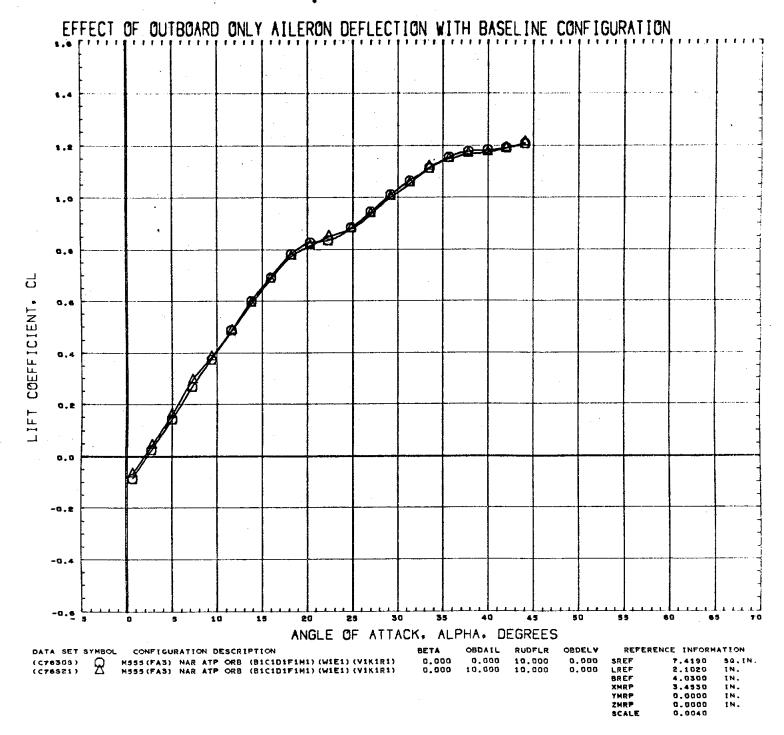
282

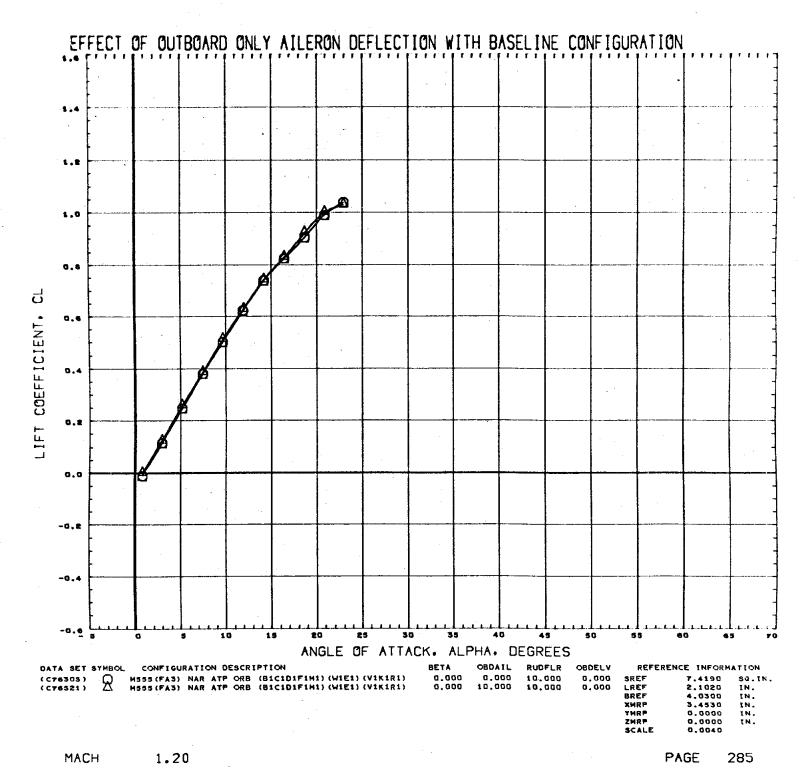


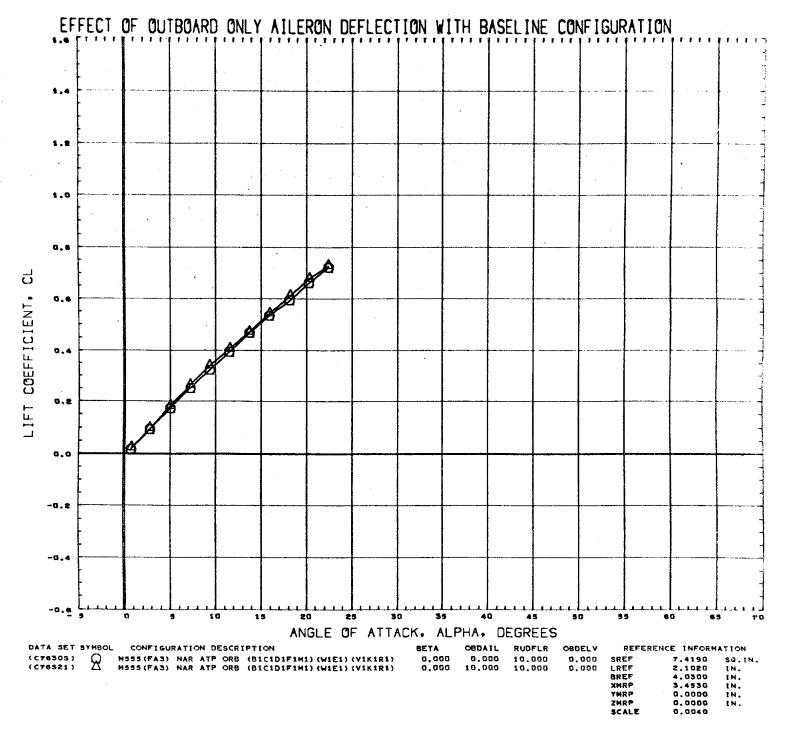
.59

PAGE

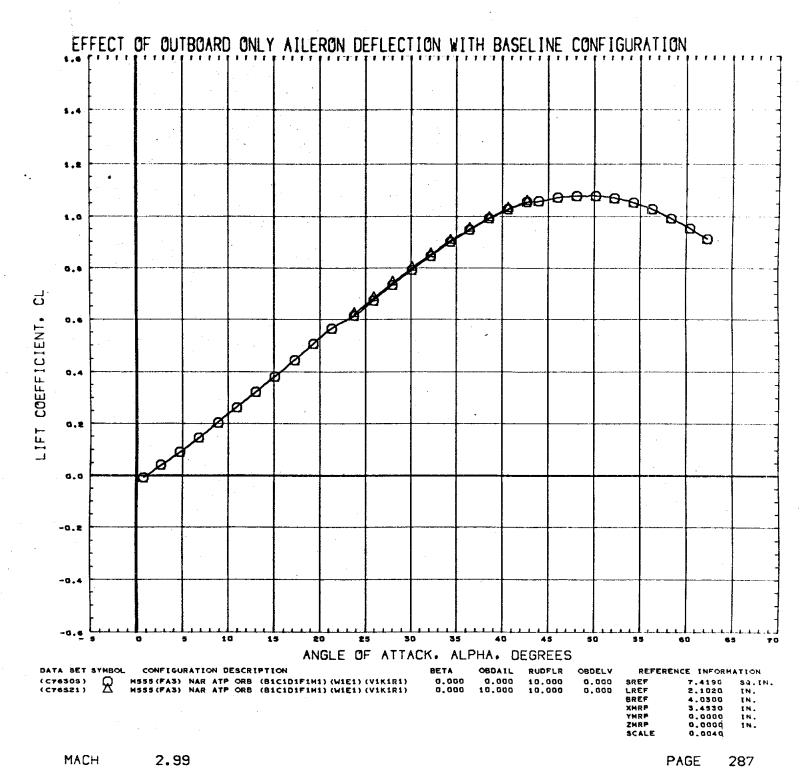
283

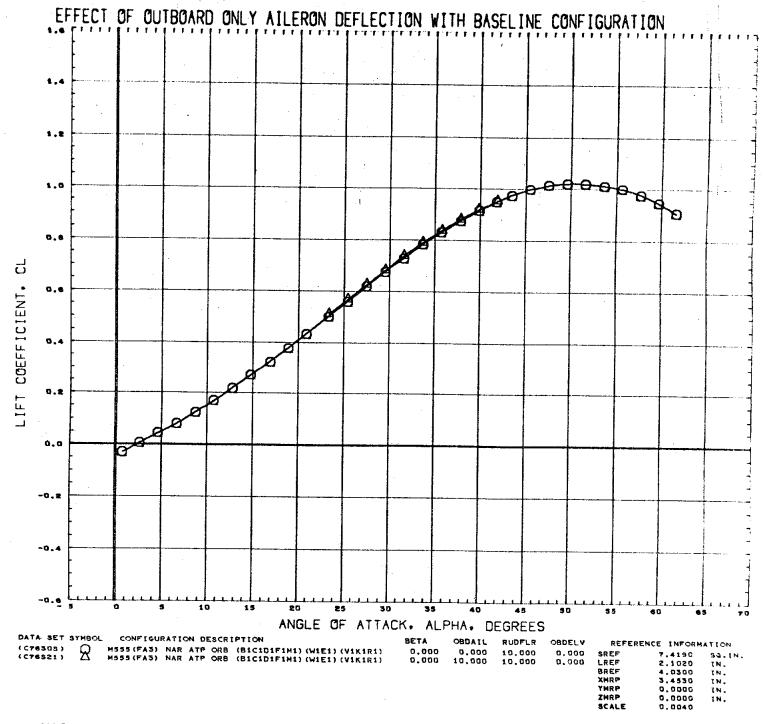






1.97

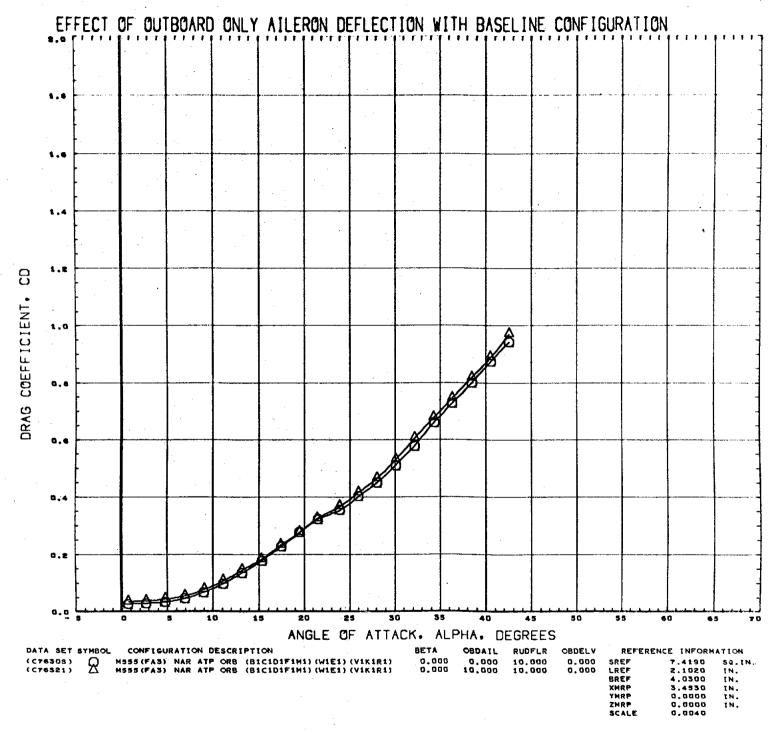




4.96

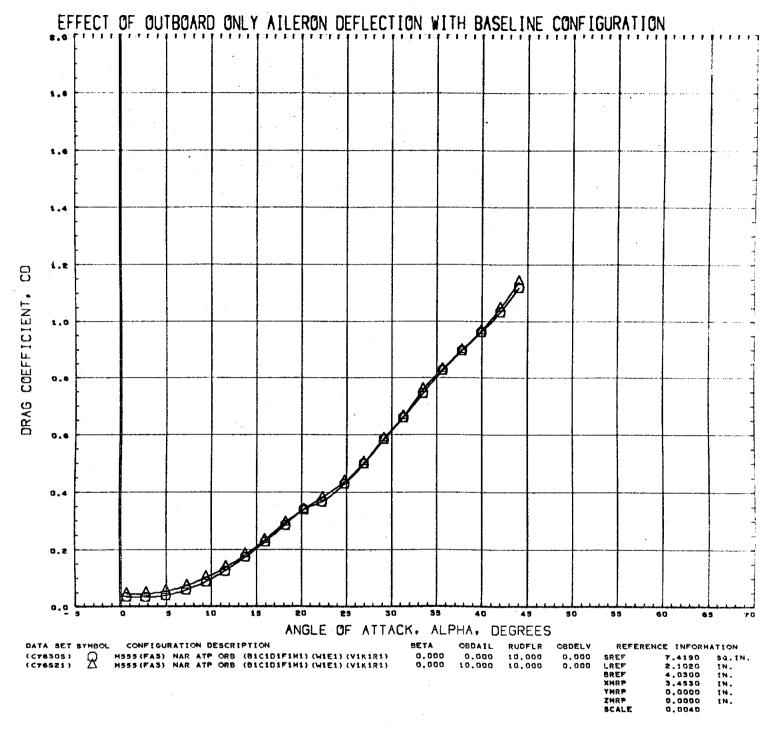
PAGE

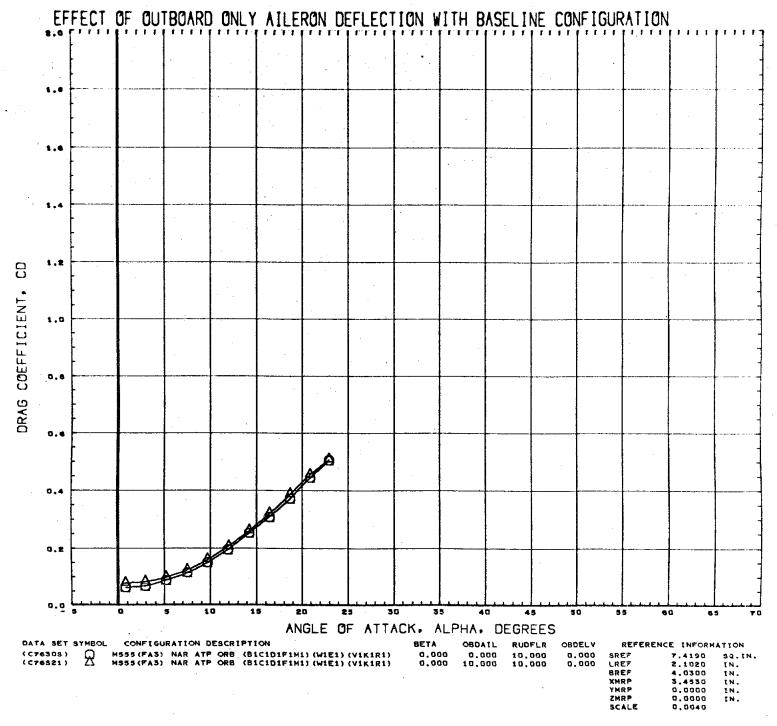
288



PAGE

289



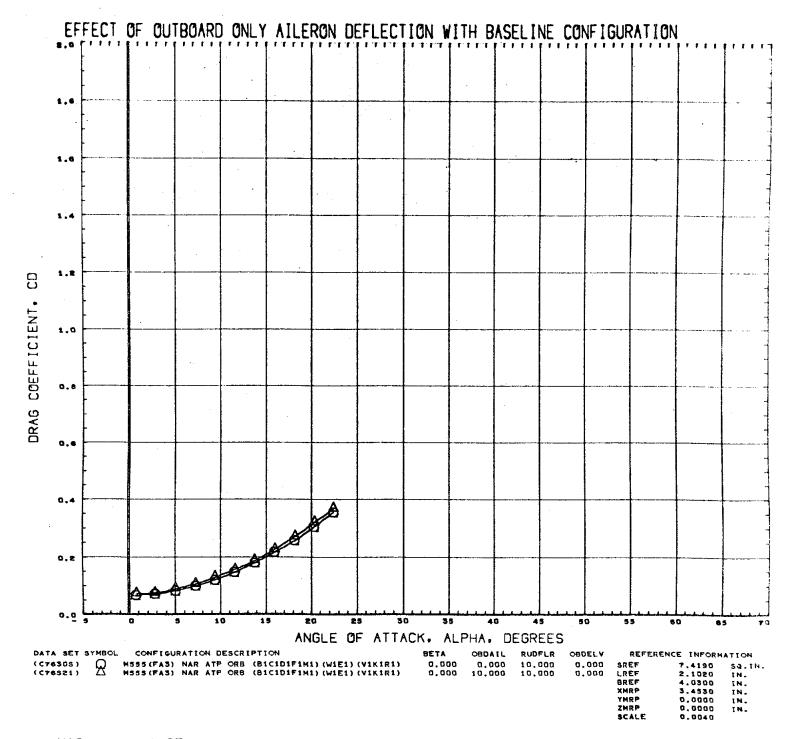


MACH

1.20

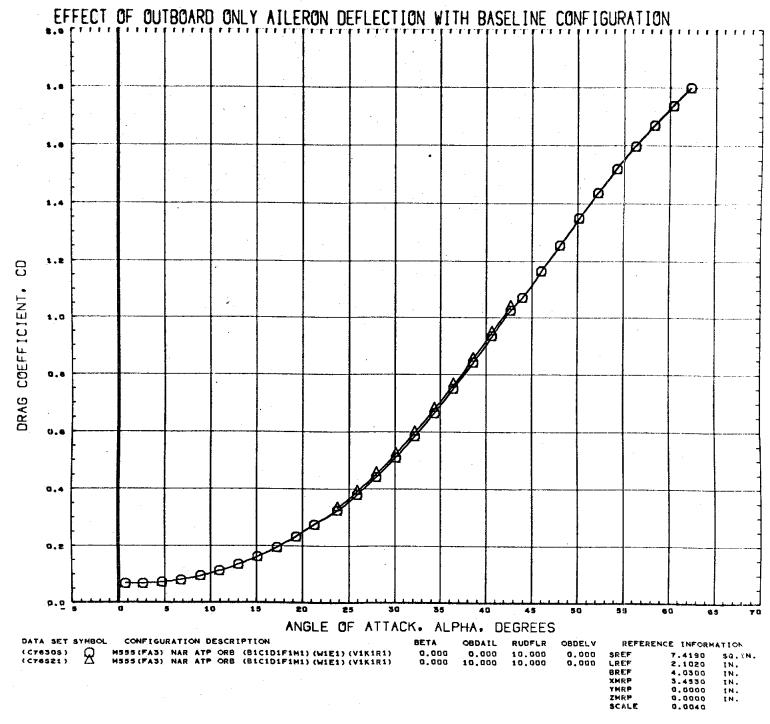
PAGE

291

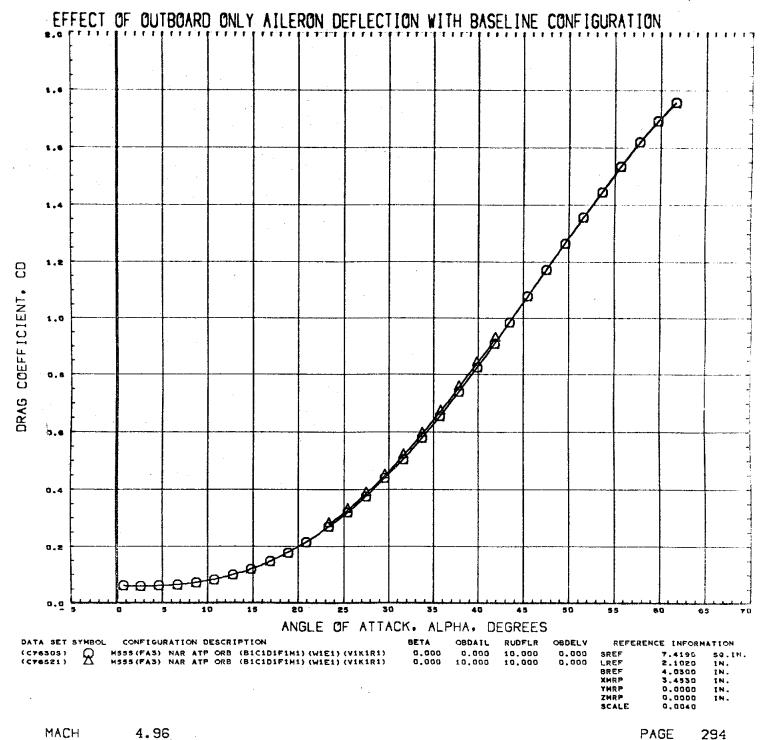


PAGE 2

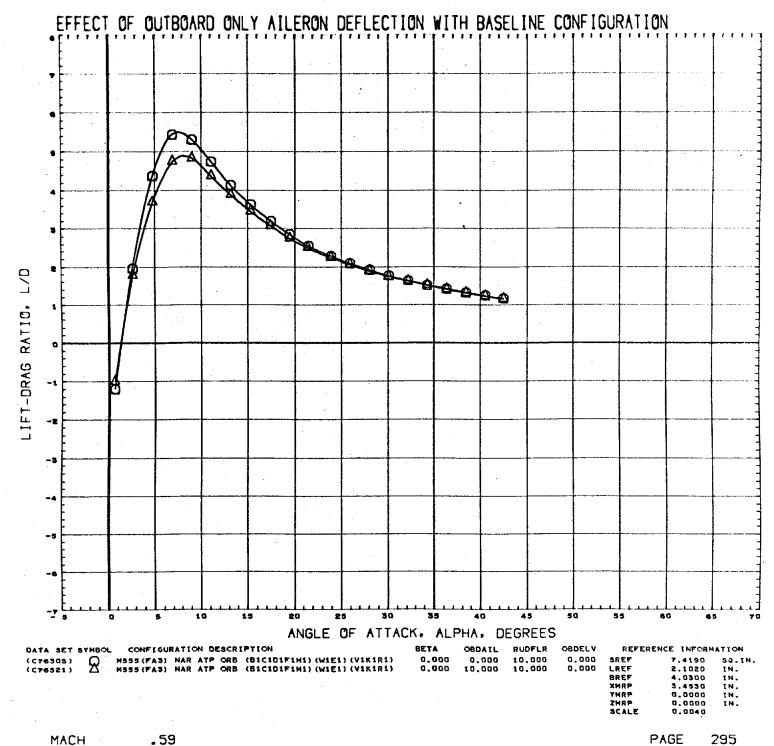
292

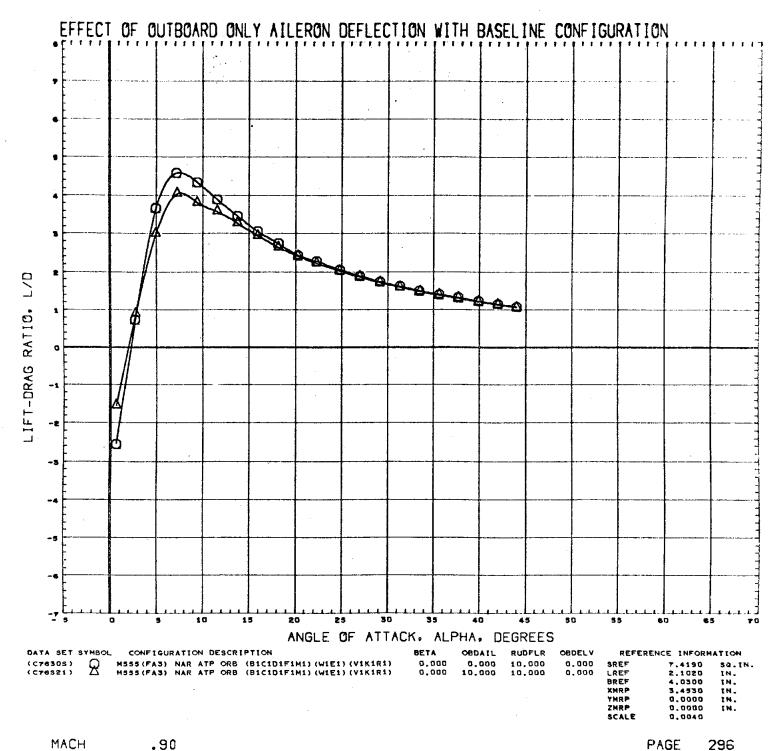


MACH 2.99



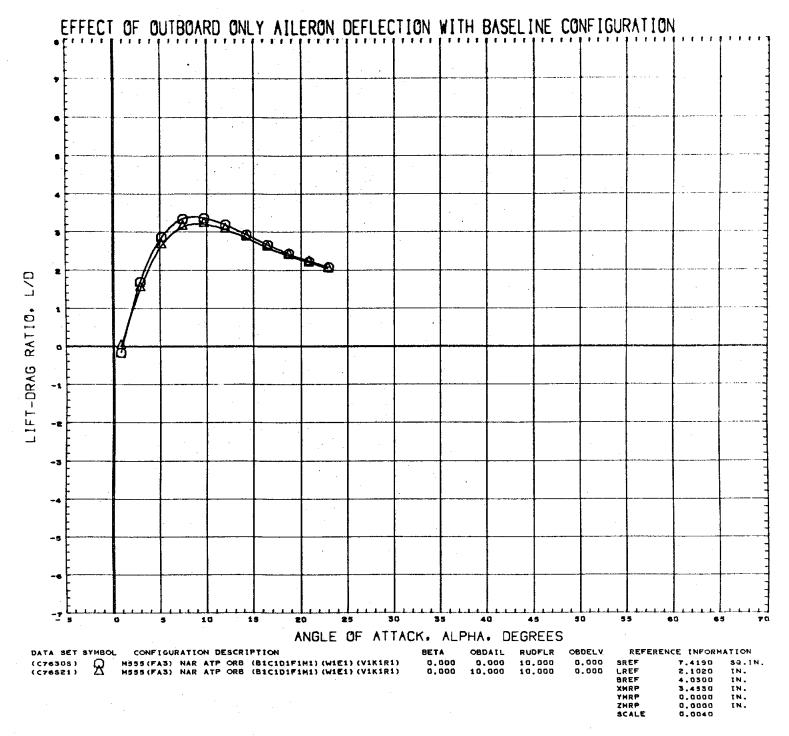
MACH 4.96

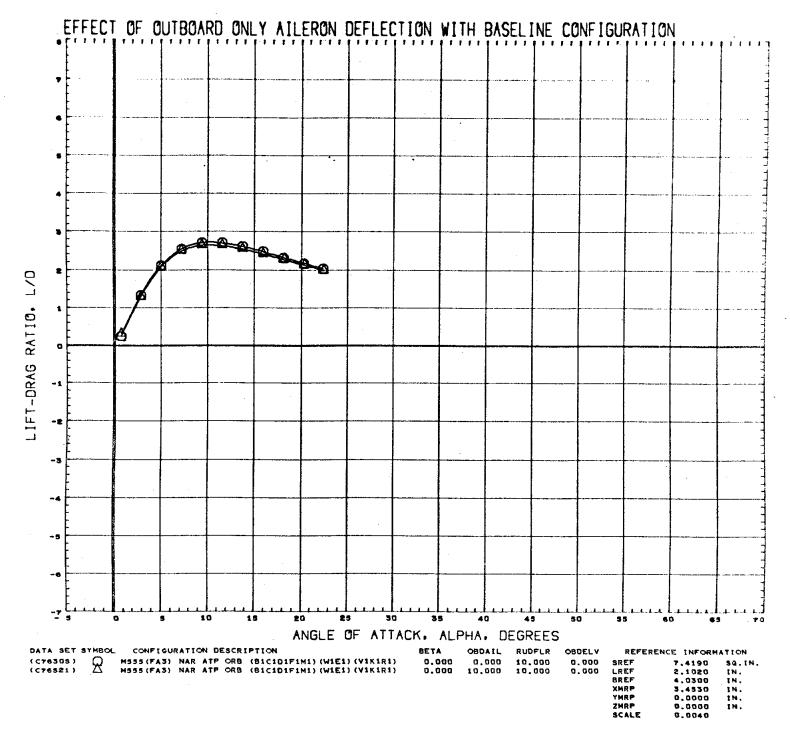


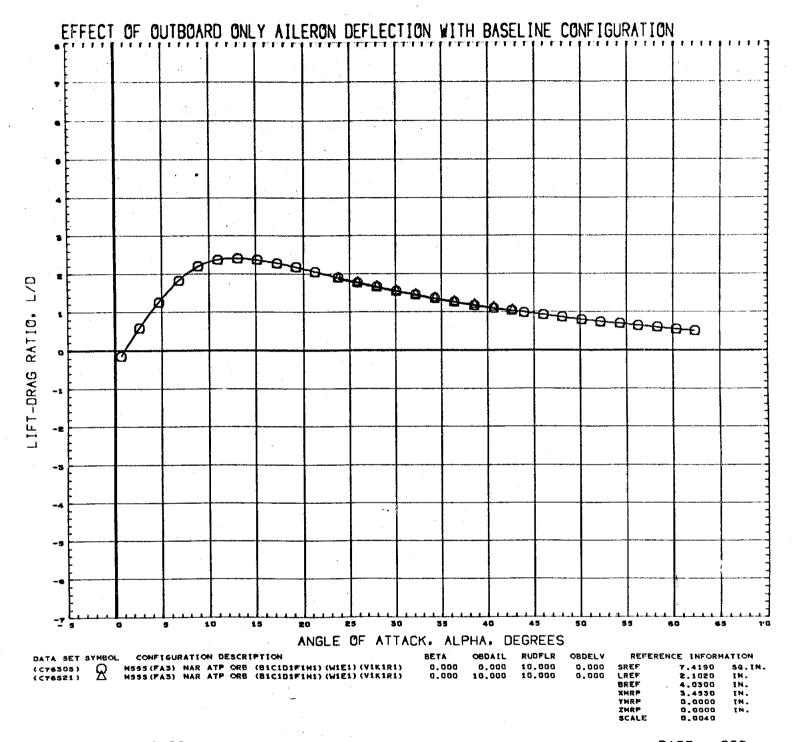


MACH

.90

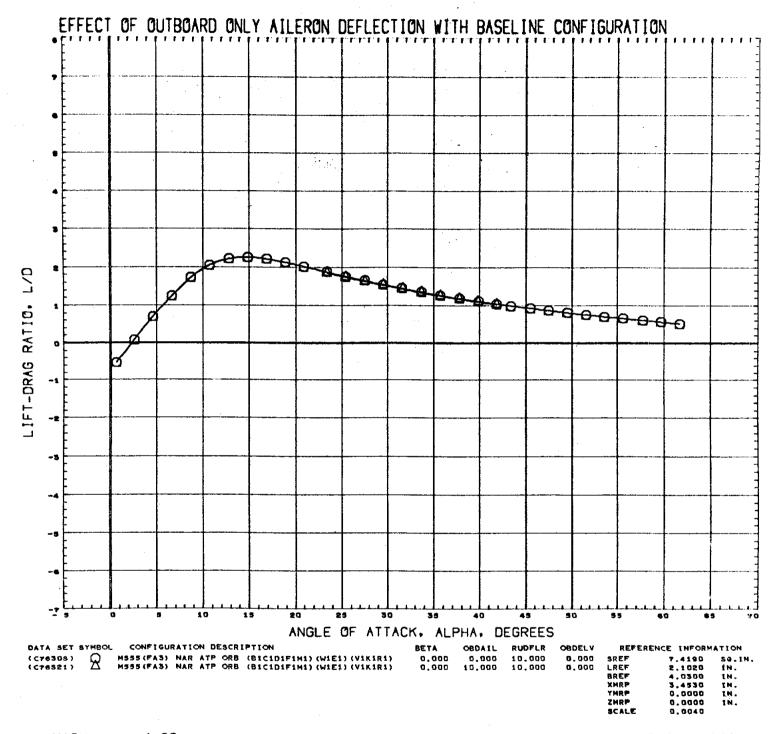




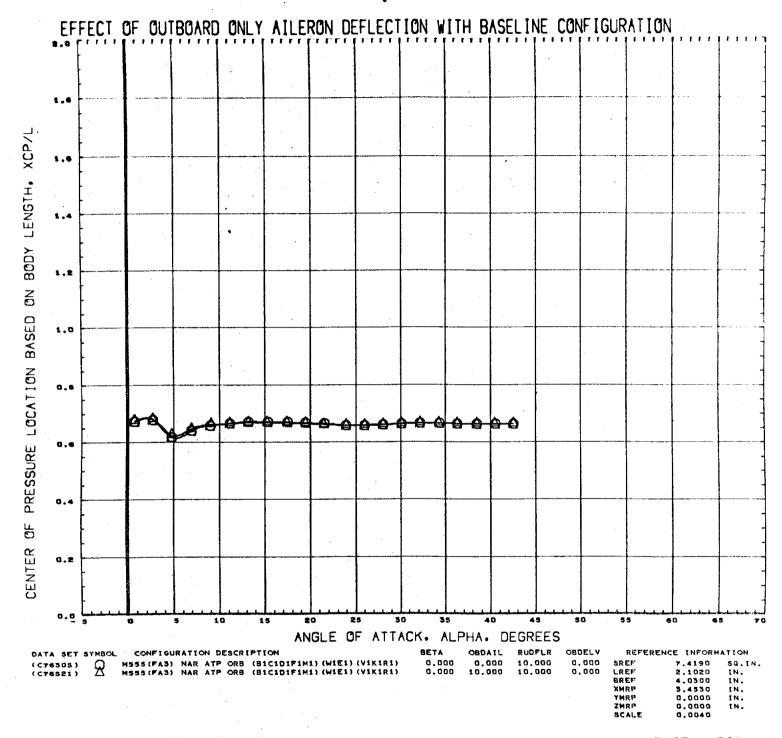


PAGE 299

MACH 2.99

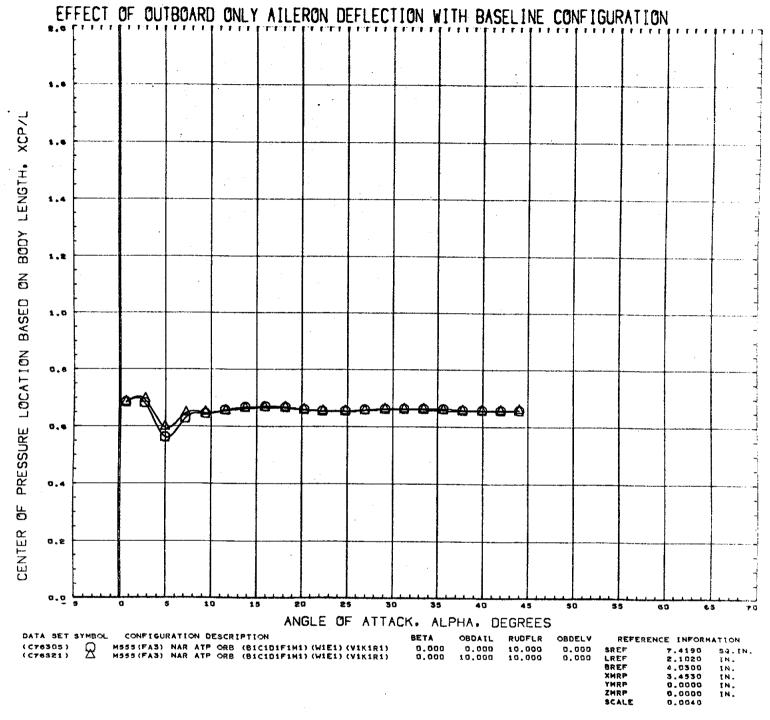


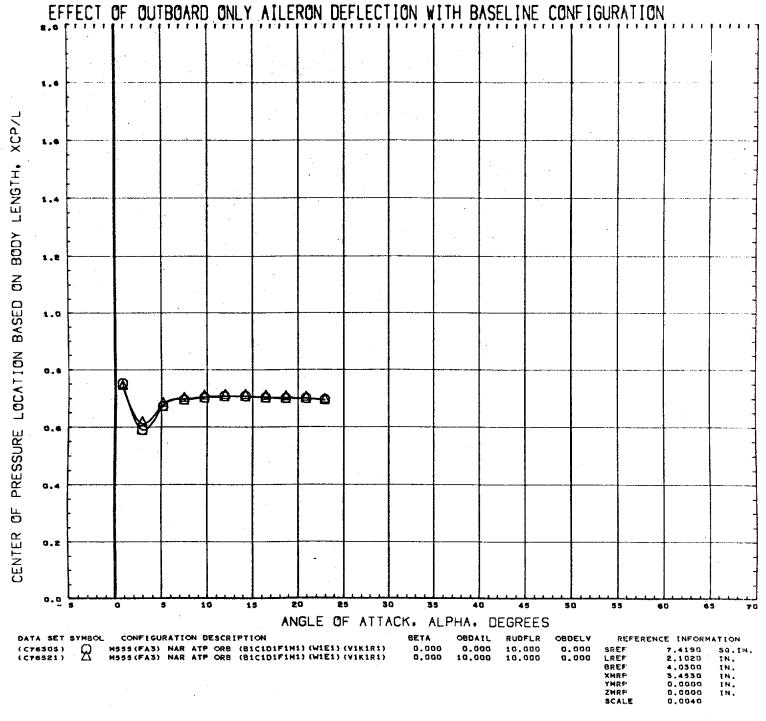
MACH 4.96



PAGE 301

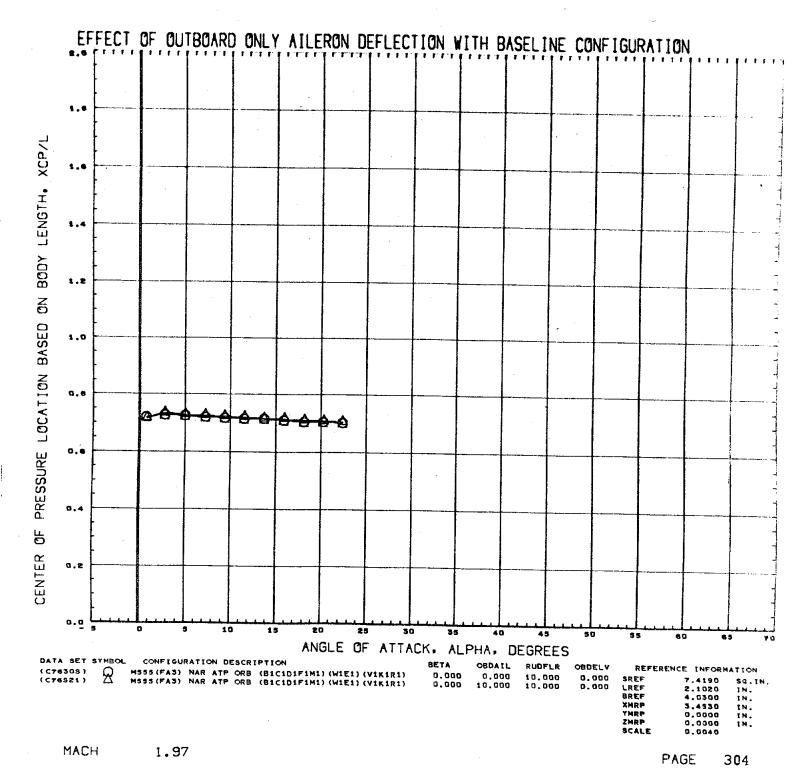
MACH .59

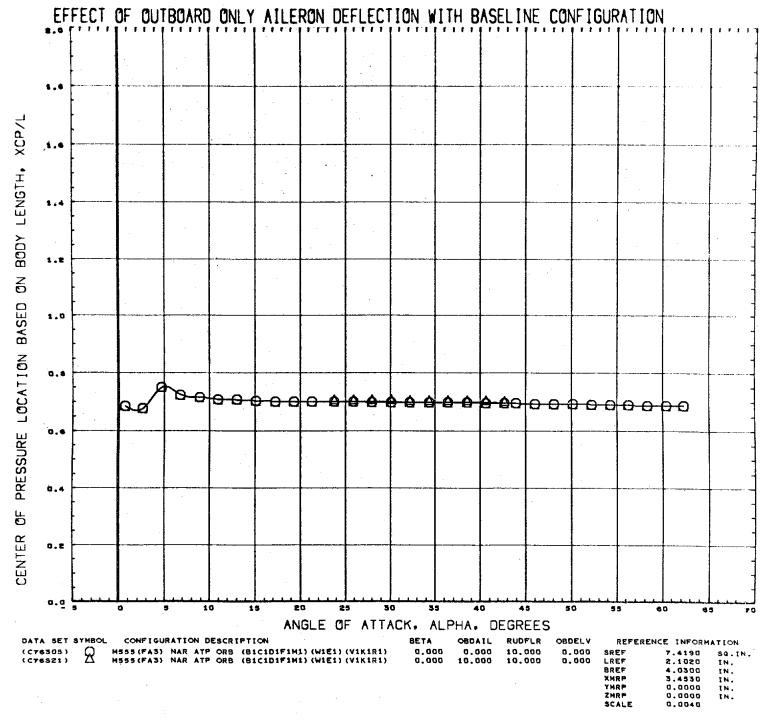




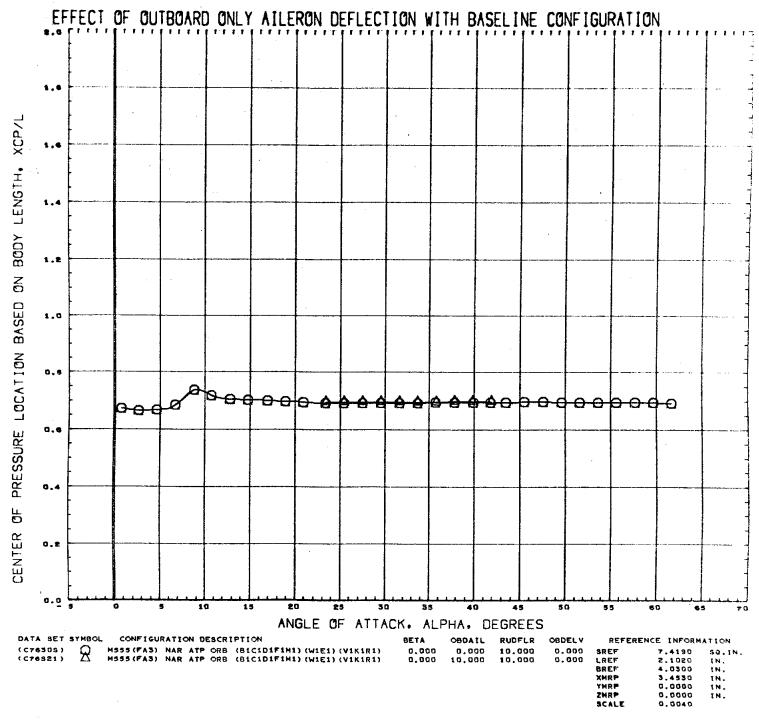
PAGE 3

303

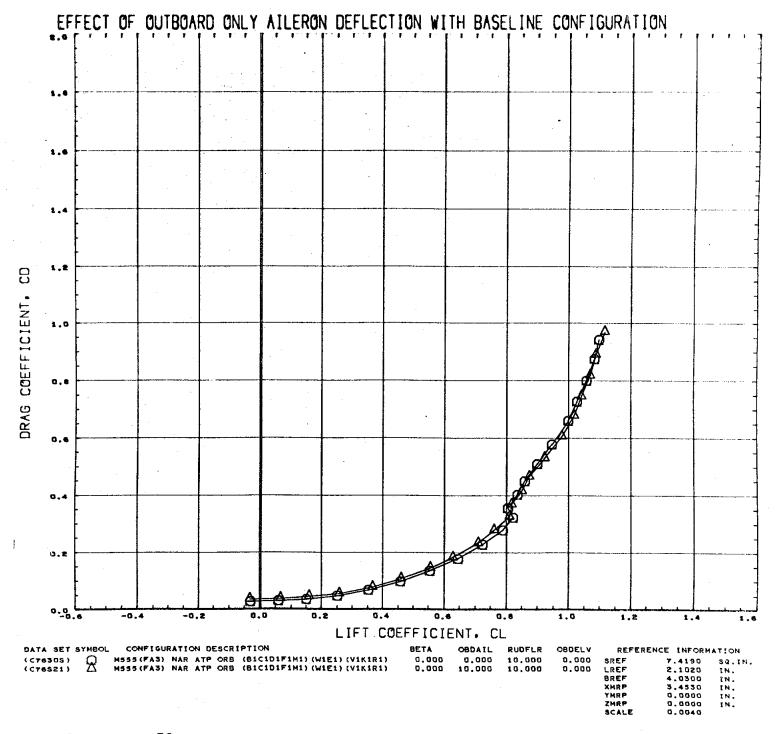


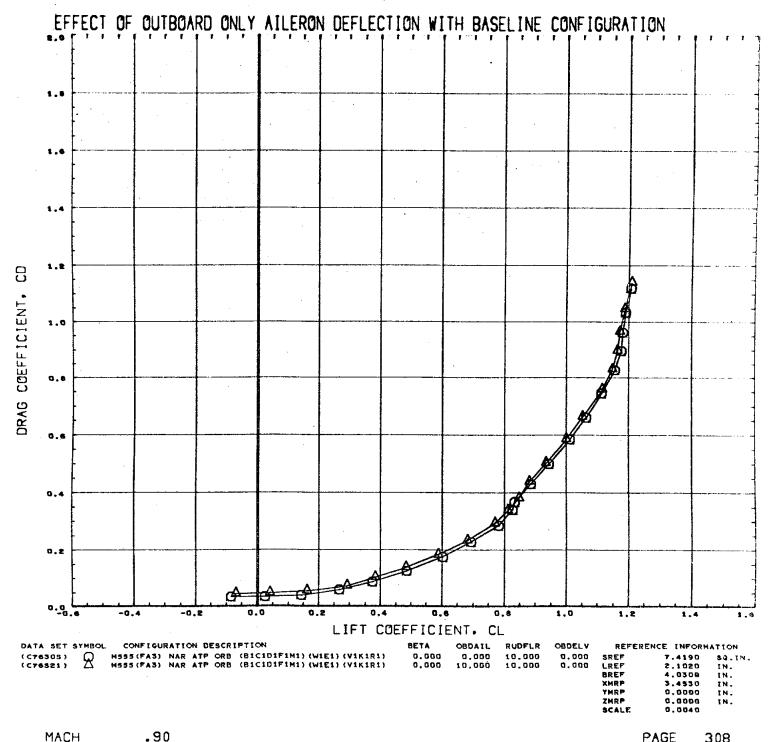


MACH 2.99



MACH 4.96

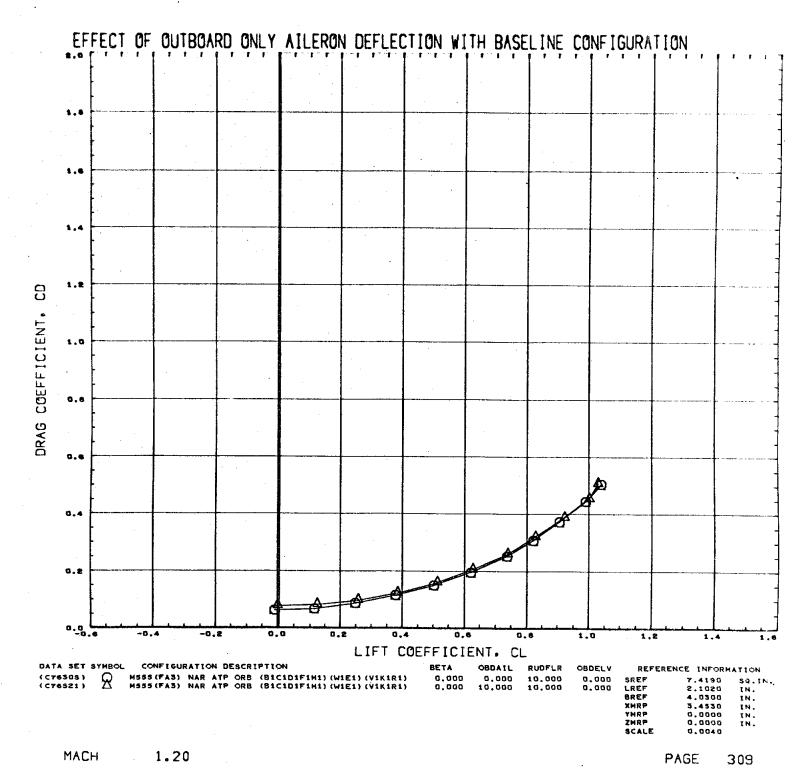


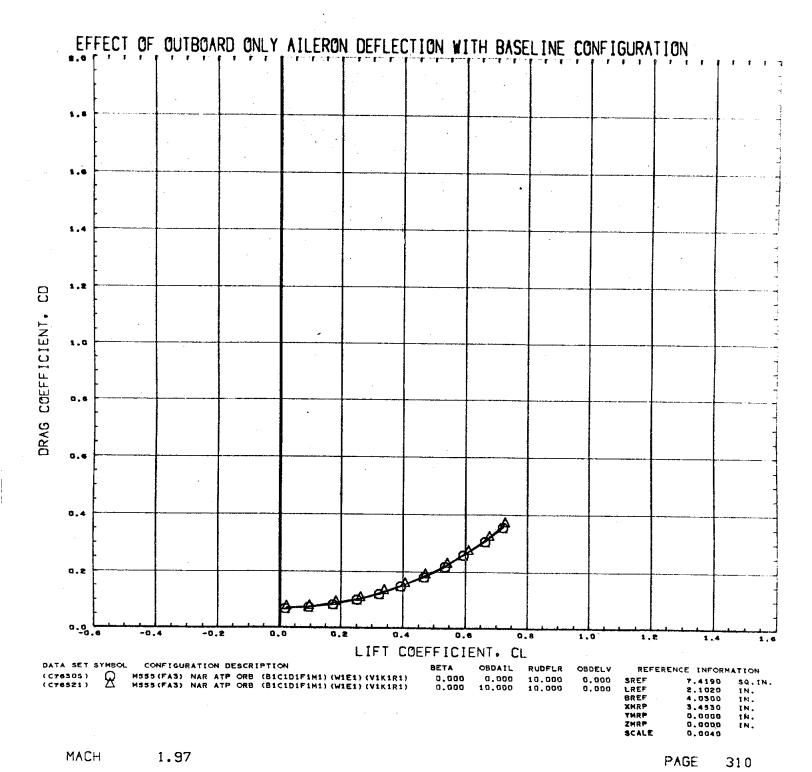


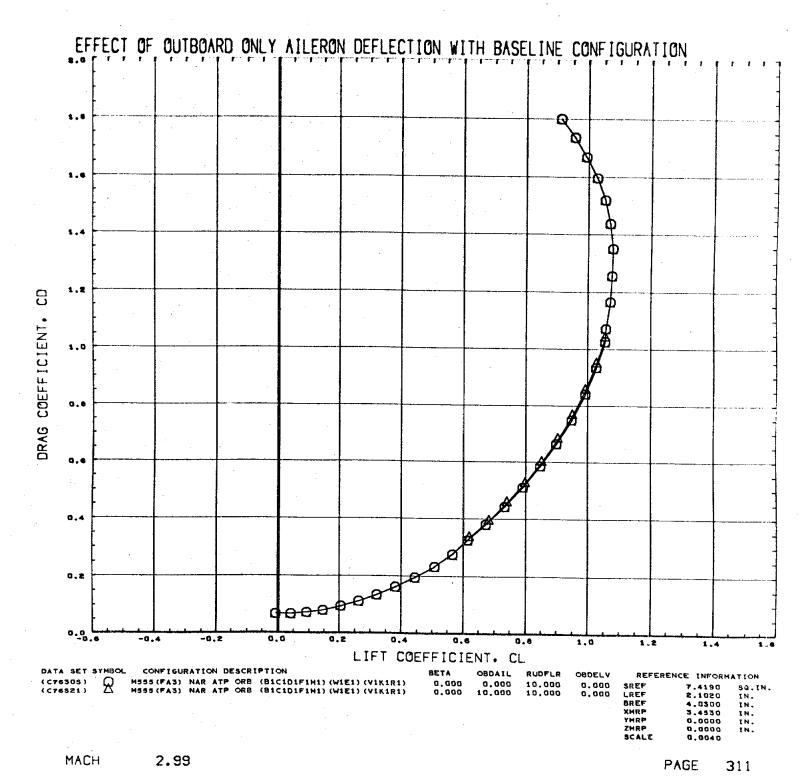
MACH

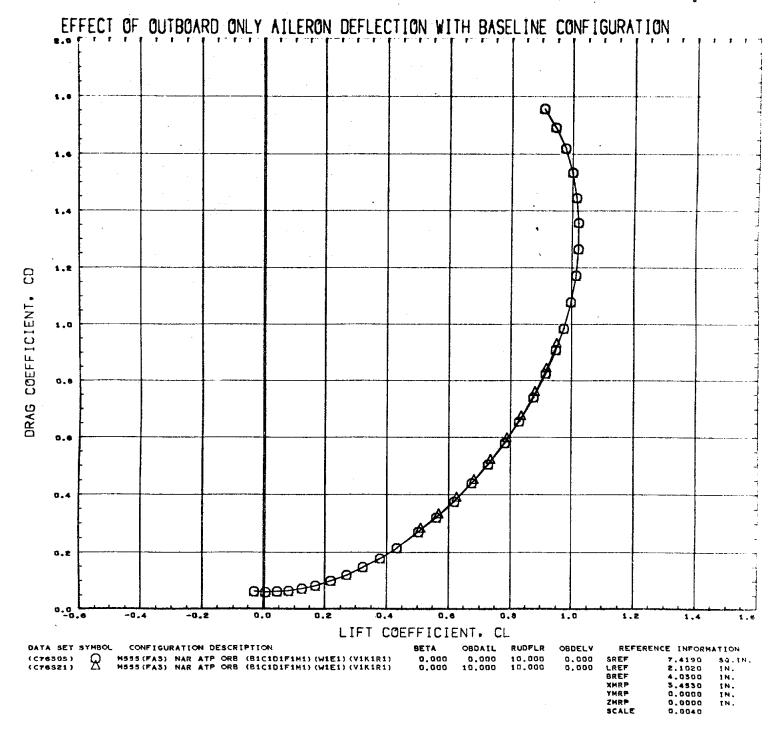
PAGE

308

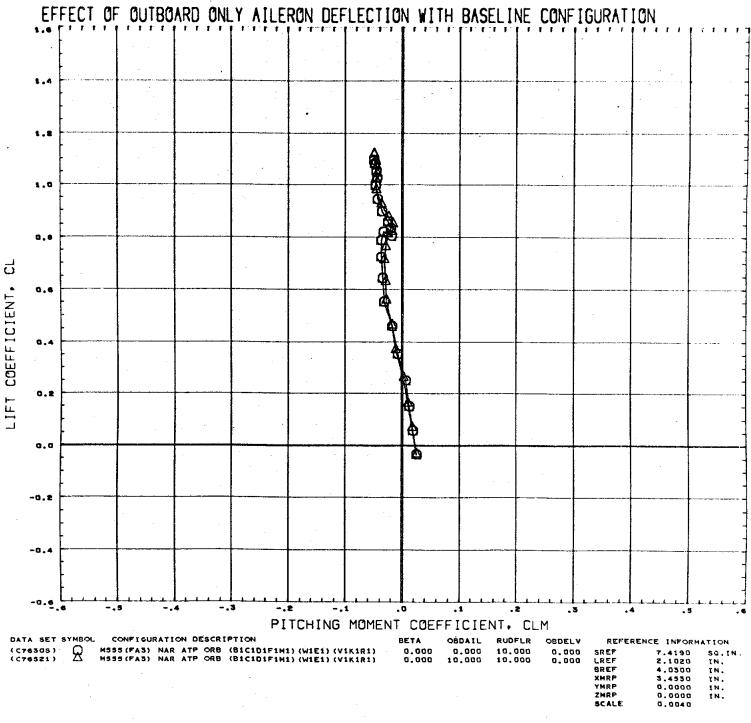


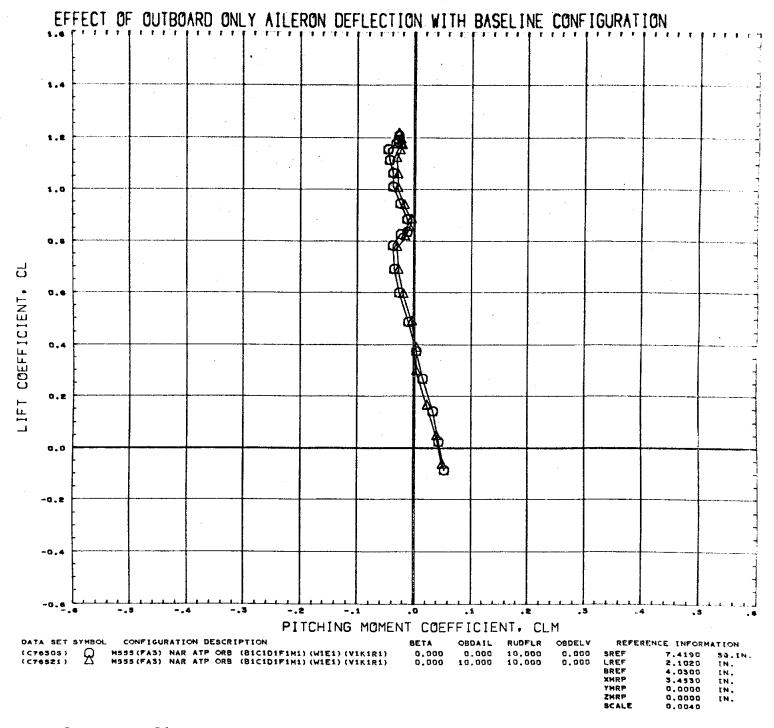






MACH 4.96



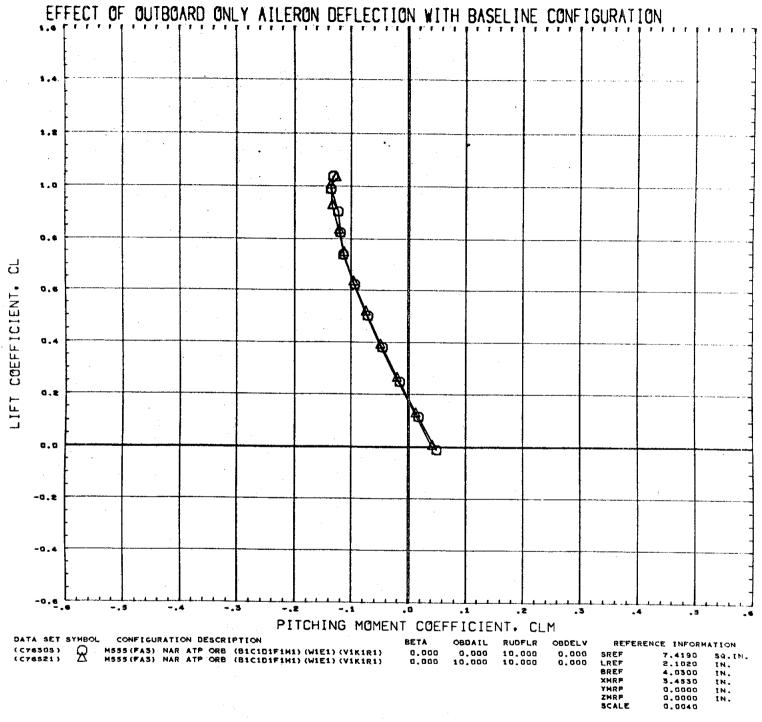


MACH

.90

PAGE

314

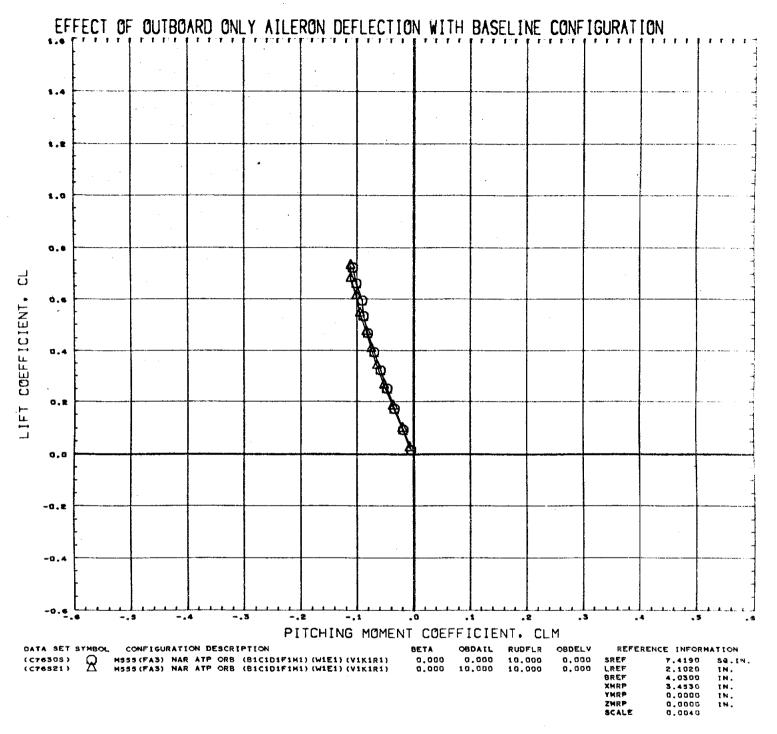


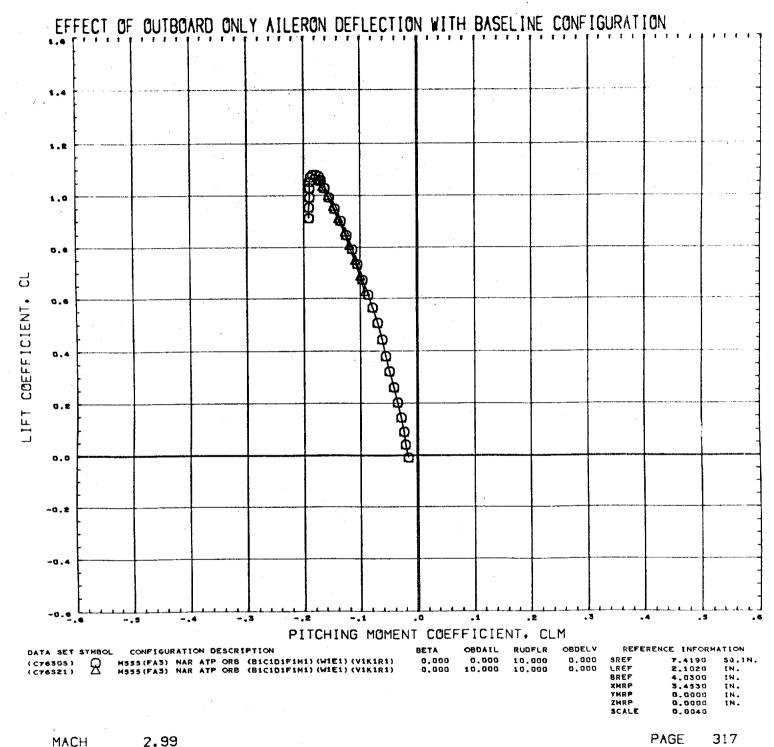
MACH

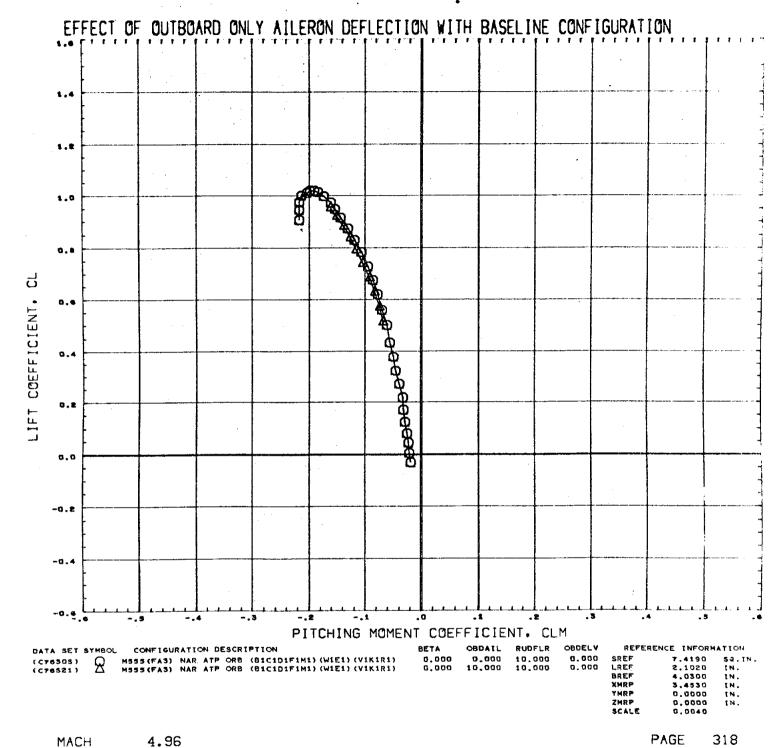
1.20

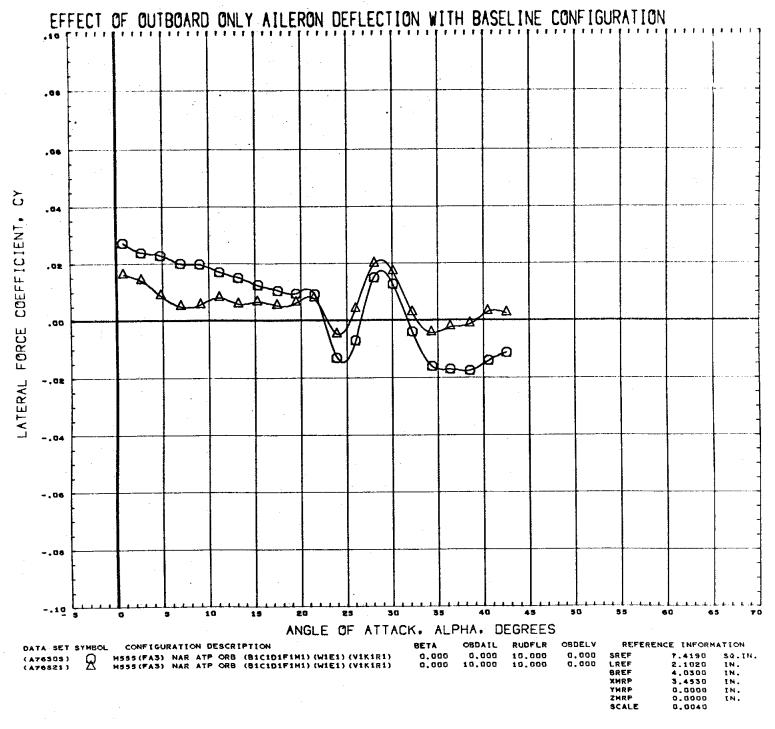
PAGE

315



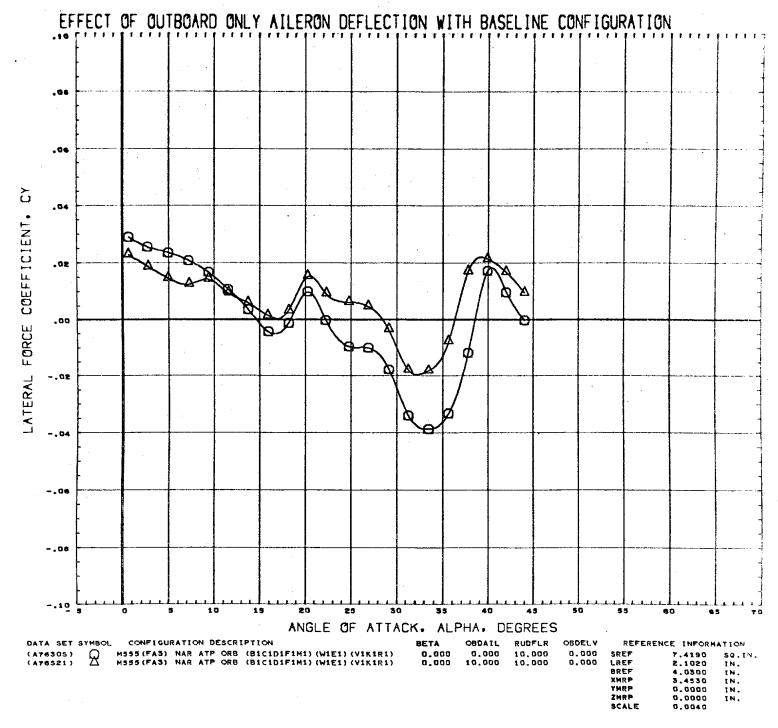


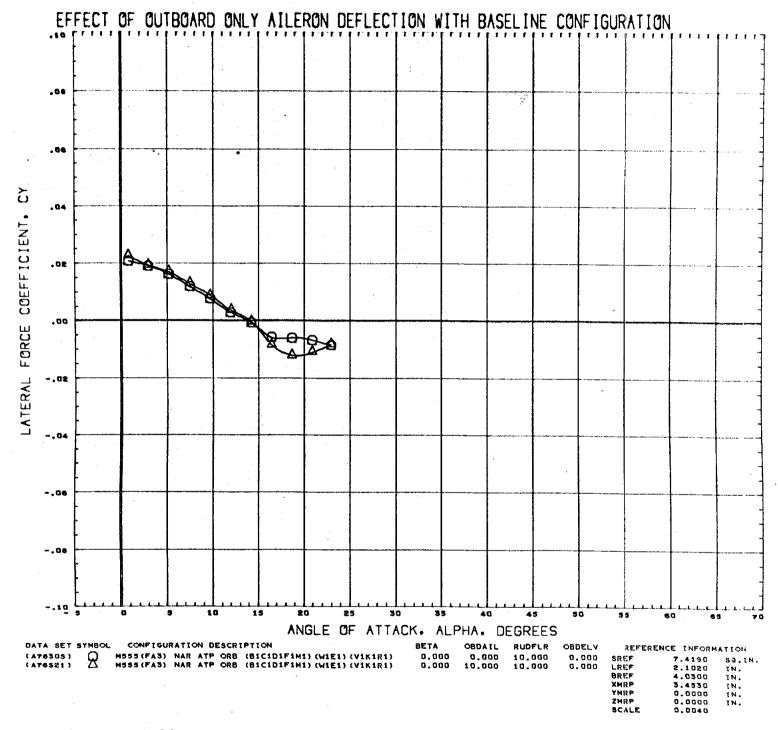


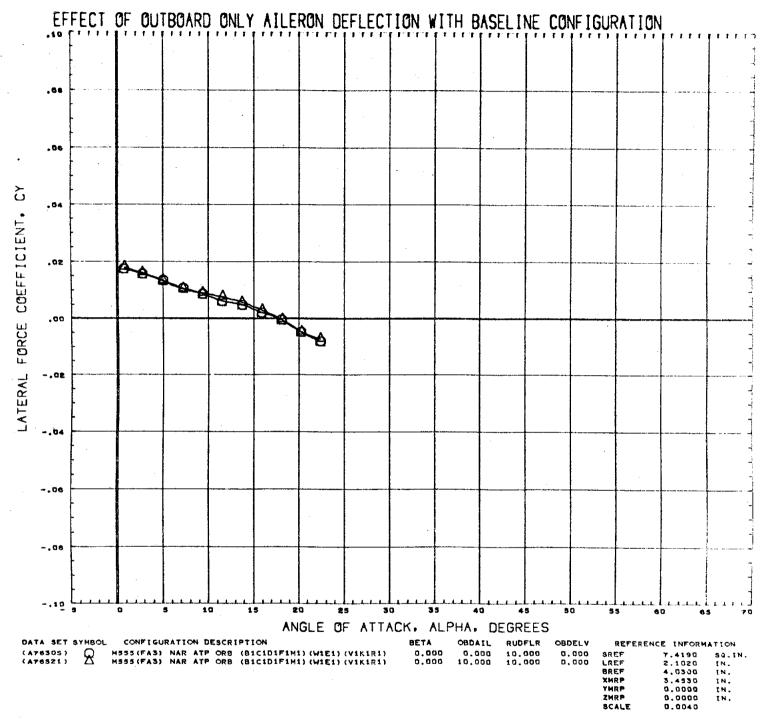


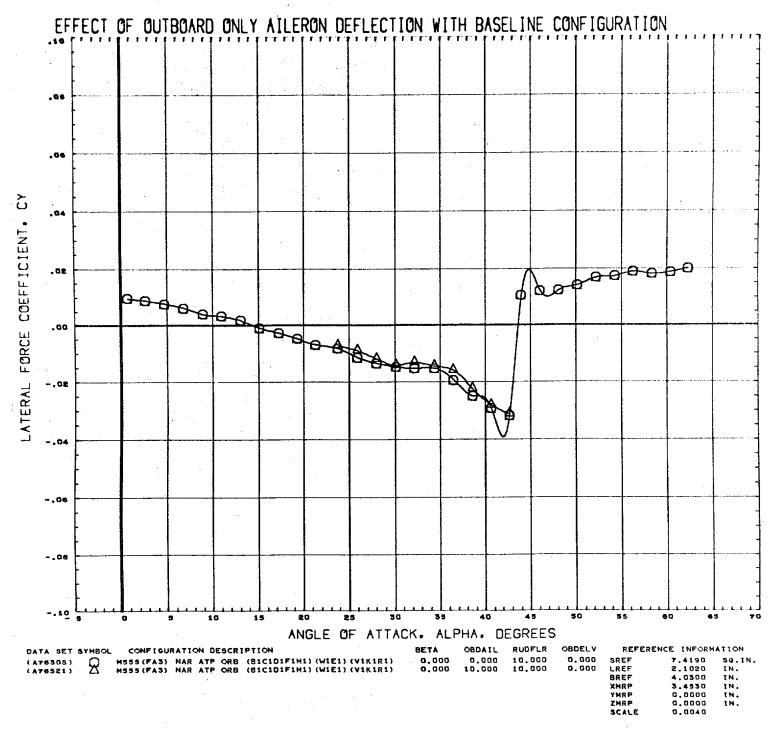
MACH

.59



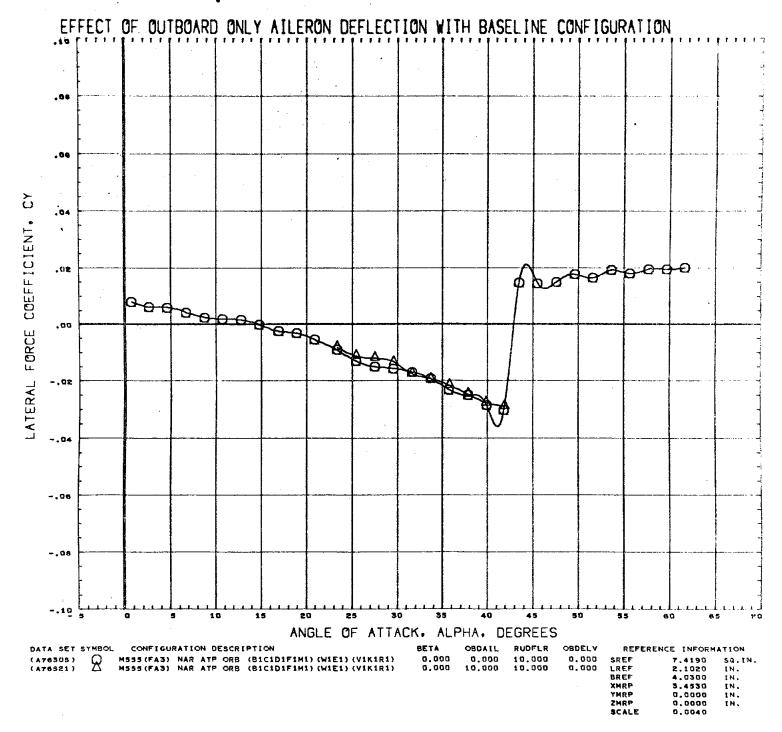




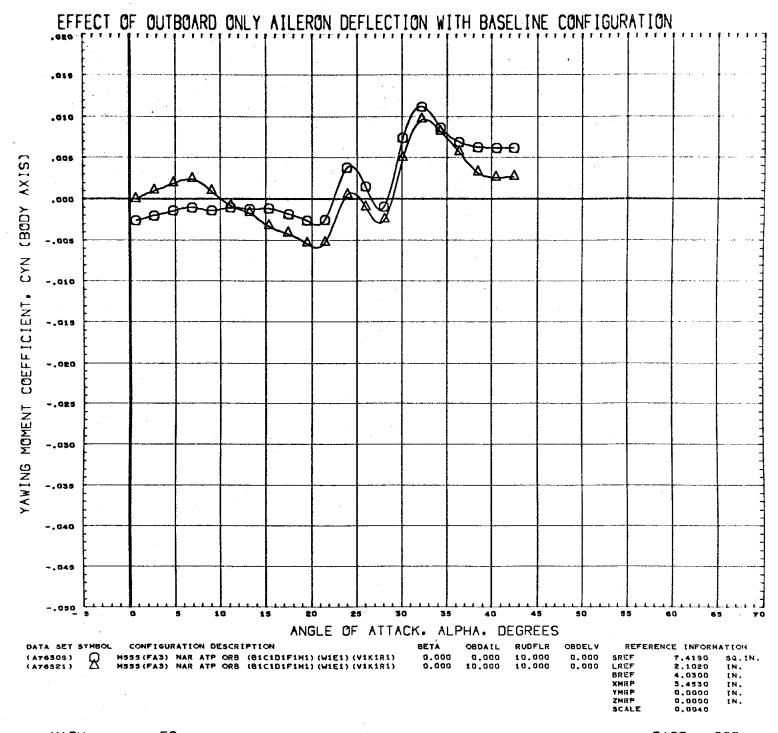


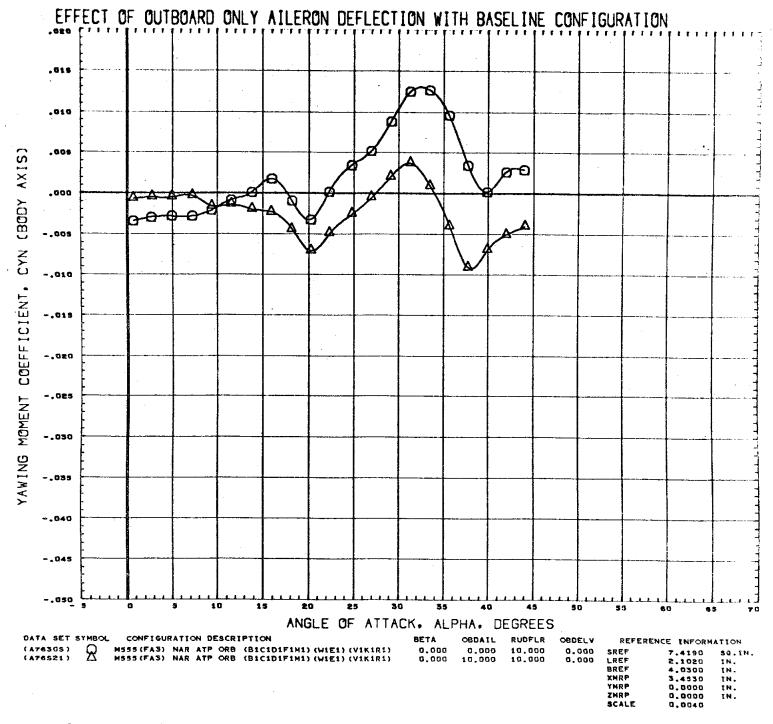
2.99

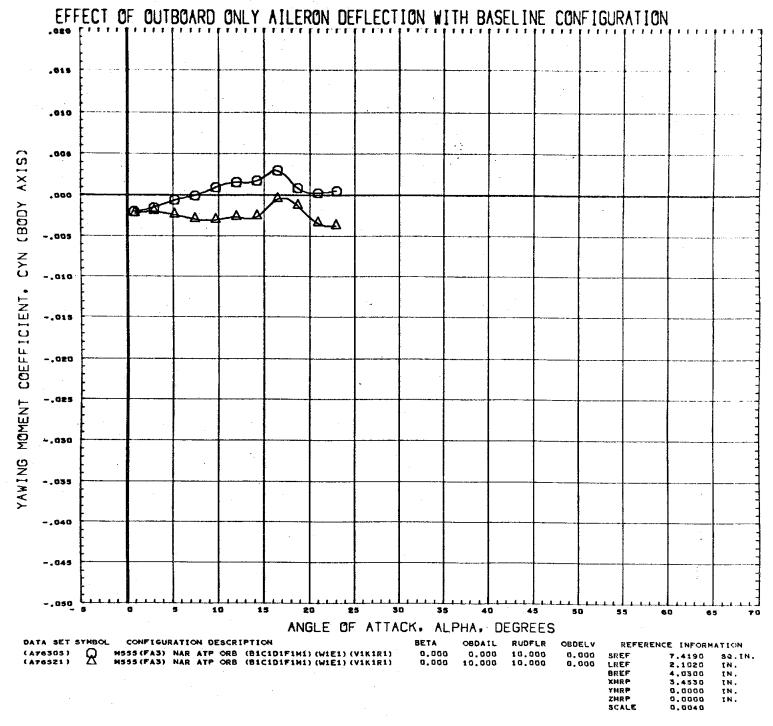
MACH



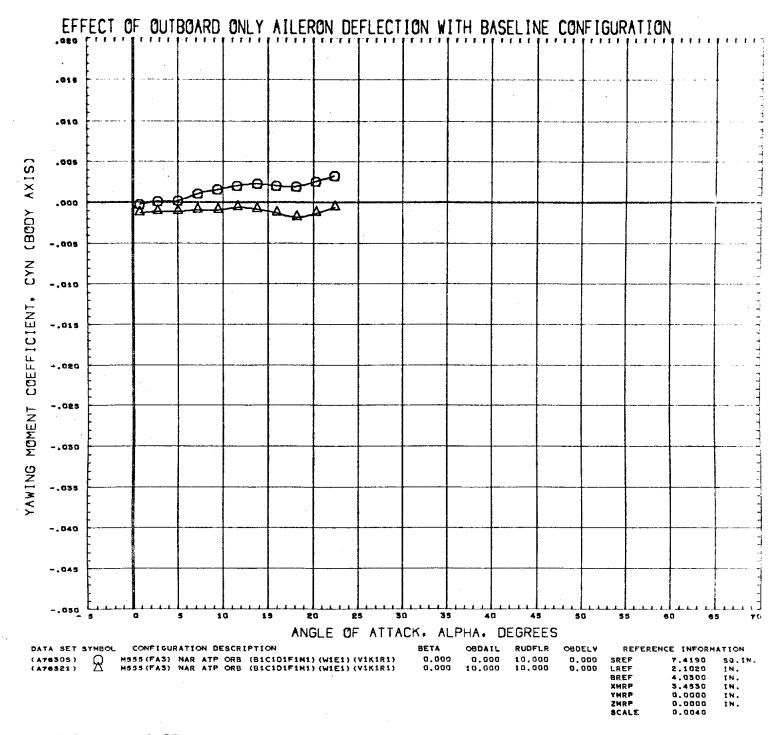
MACH 4.96



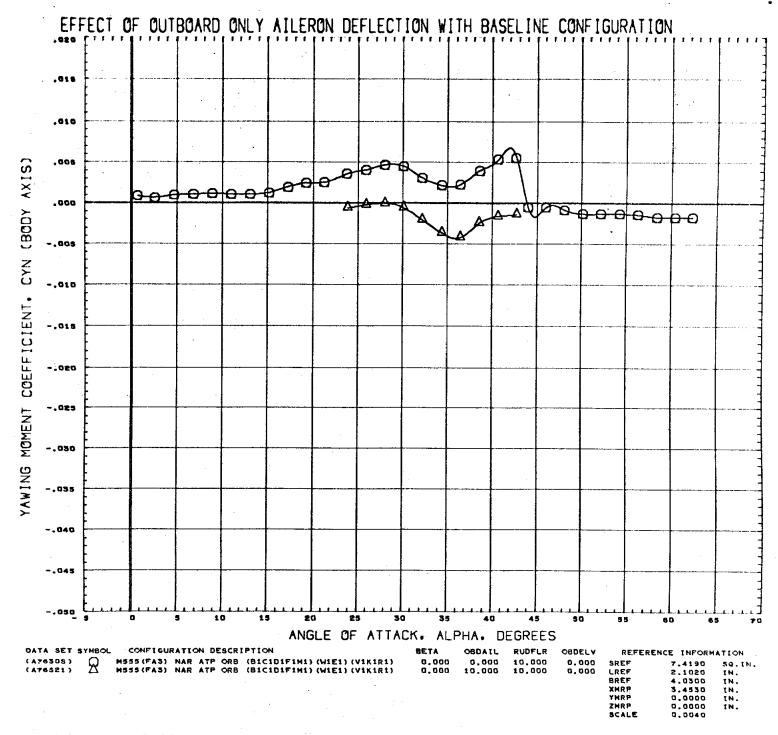




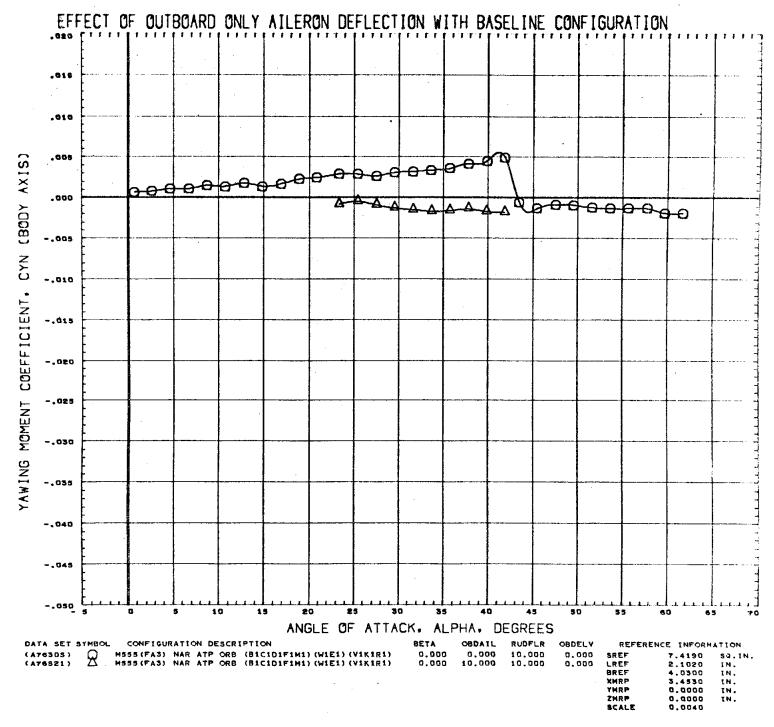
MACH 1.20



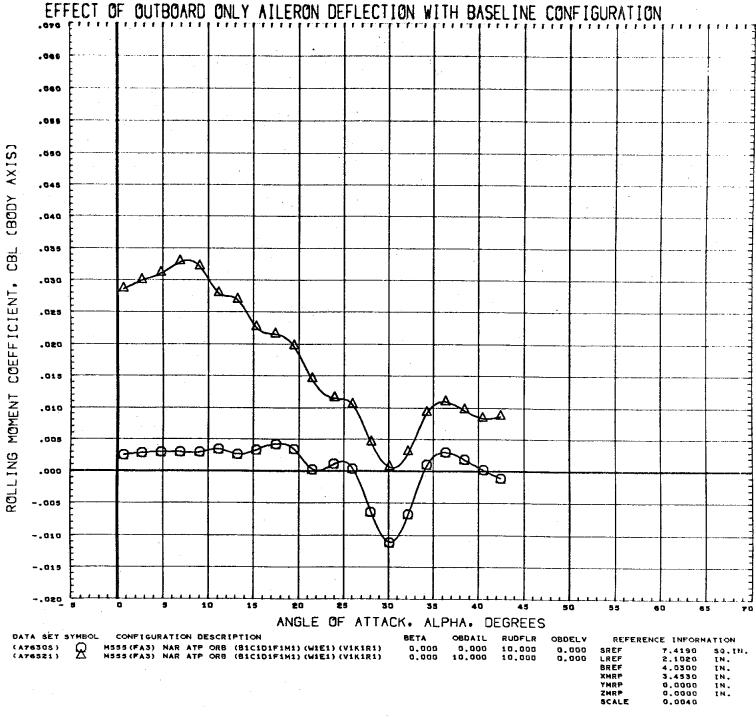
MACH 1.97



MACH 2.99



MACH 4.96

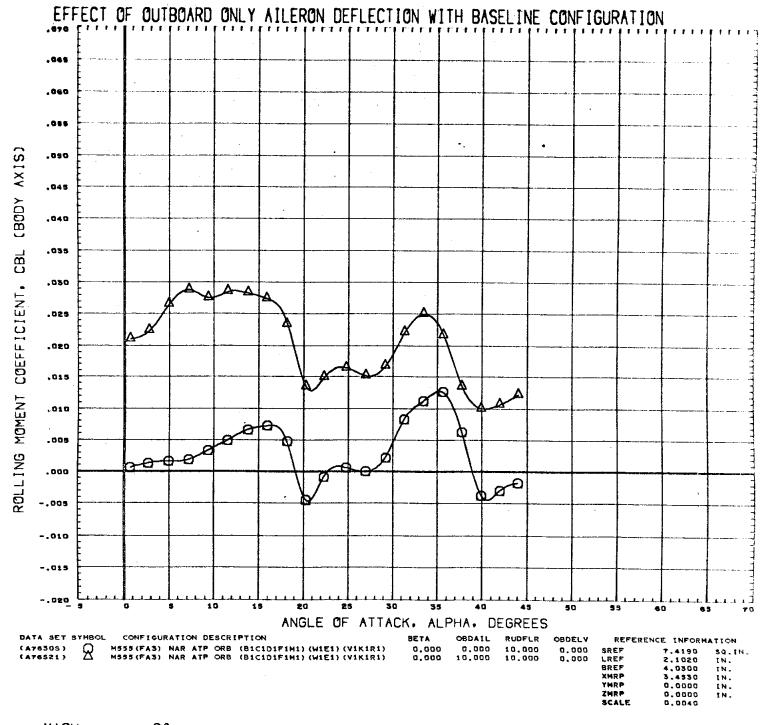


MACH

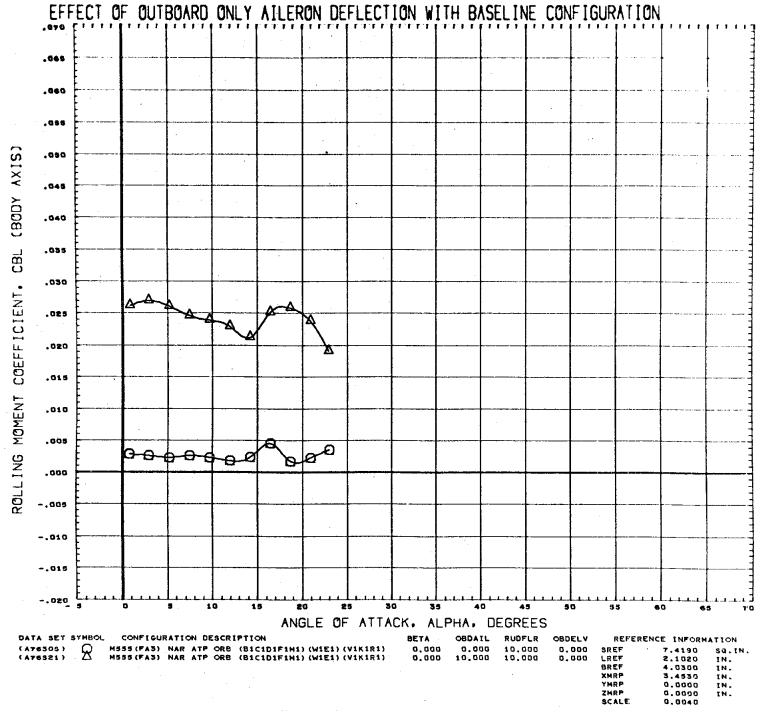
.59

PAGE

331



MACH .90

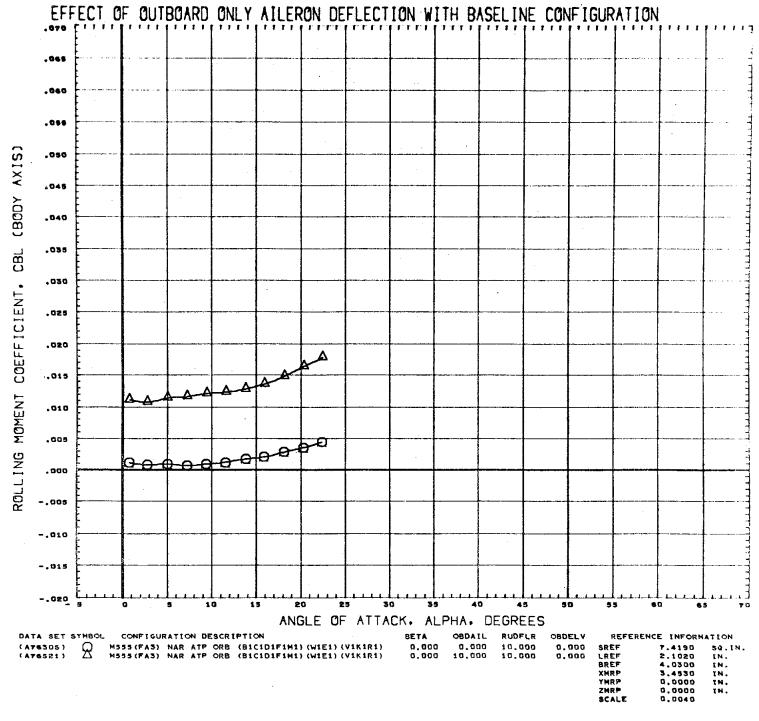


MACH

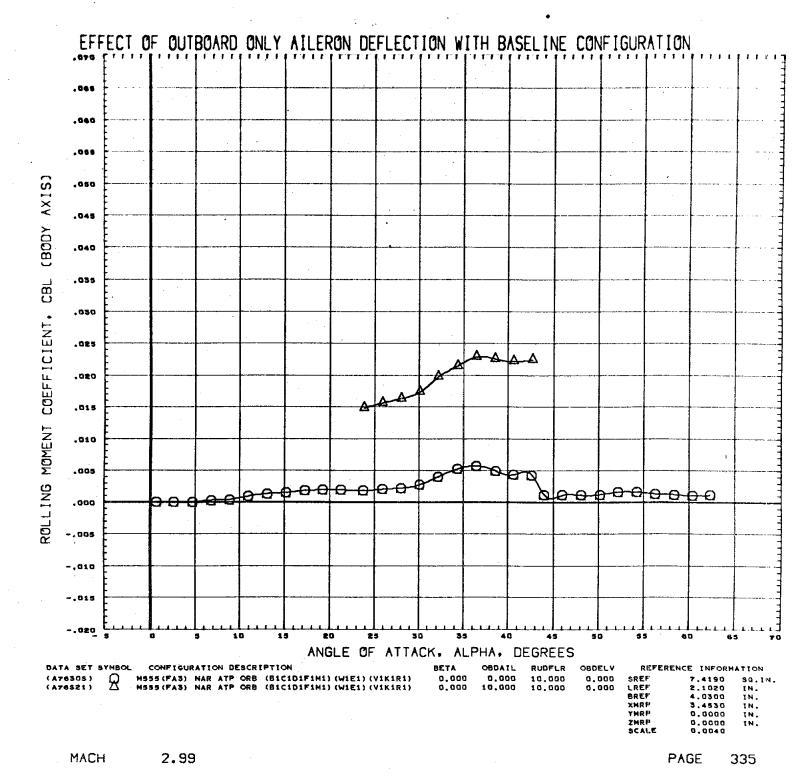
1.20

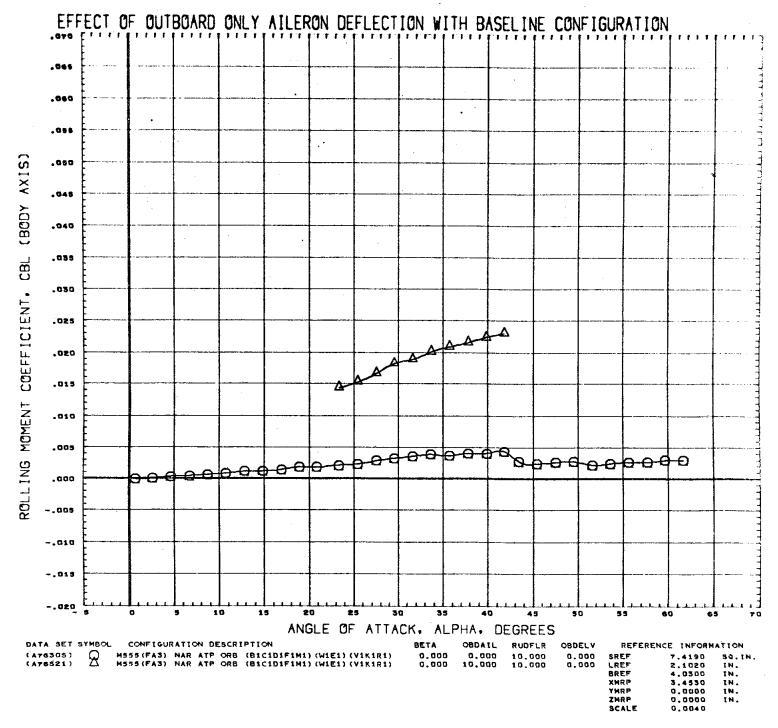
PAGE

333

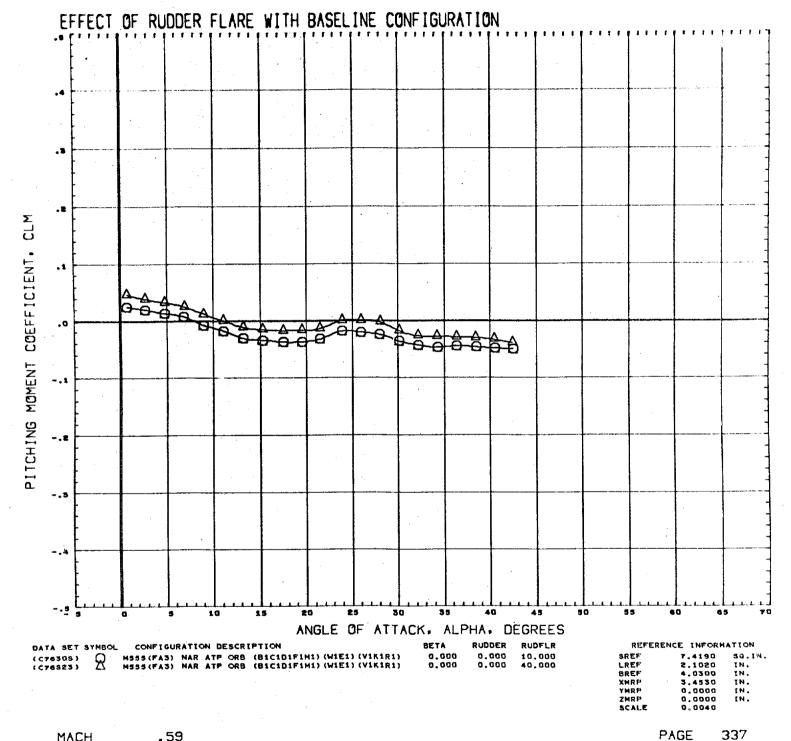


MACH 1.97

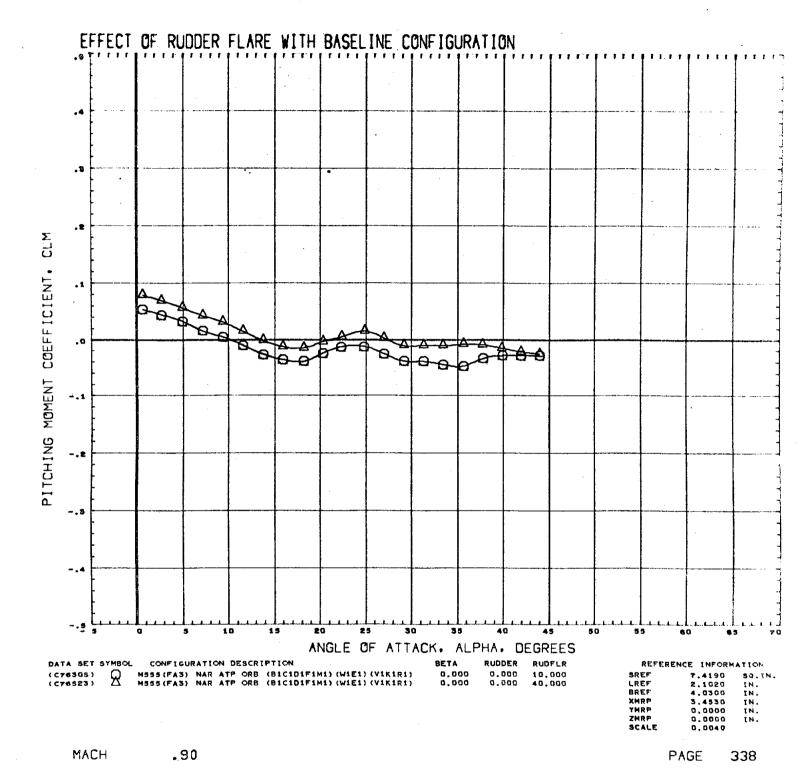


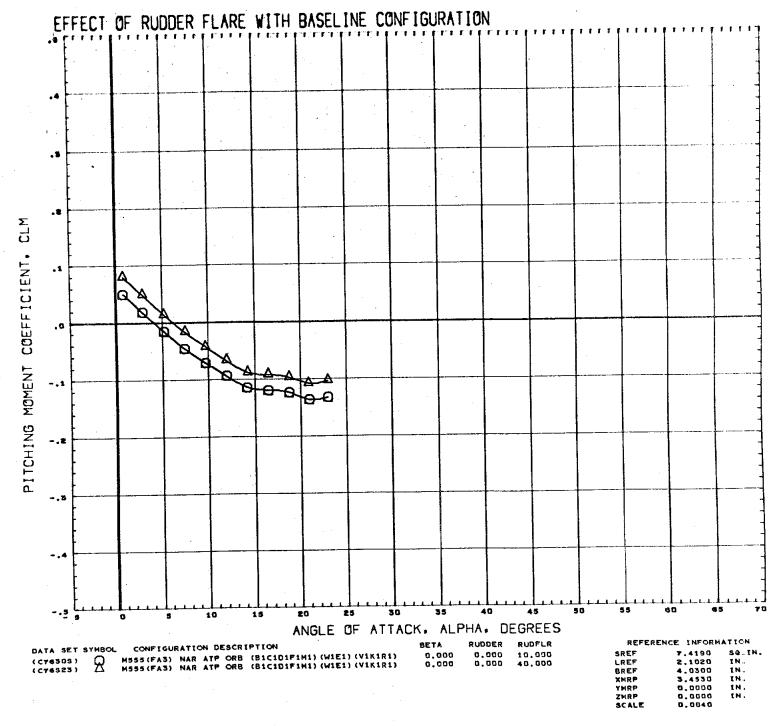


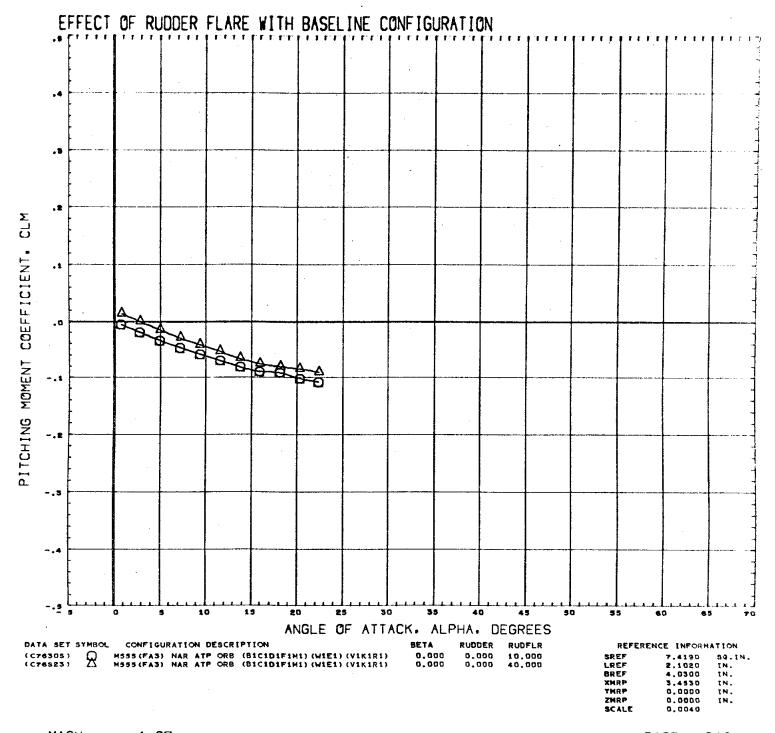
MACH 4.96



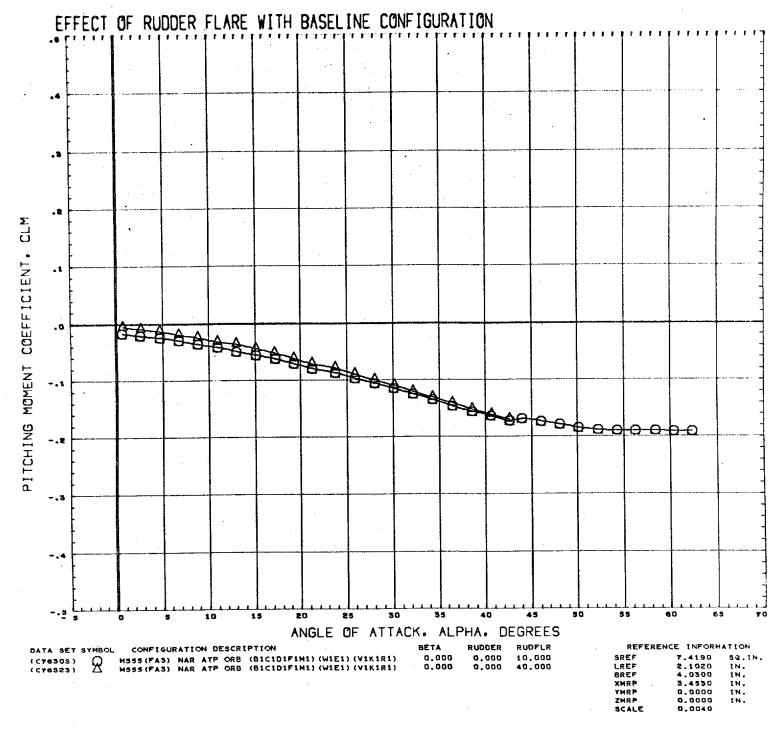
.59 MACH





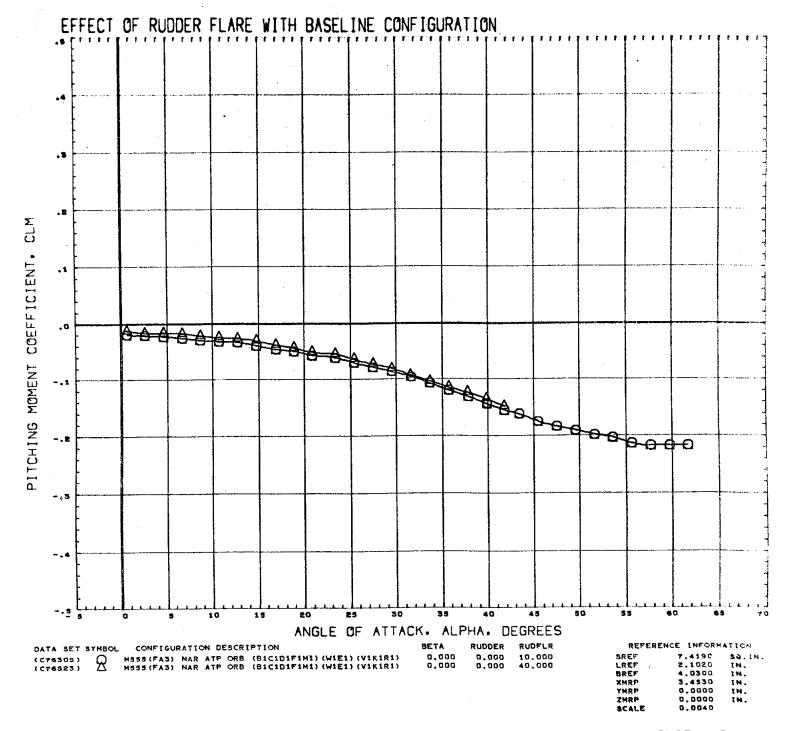


MACH 1.97



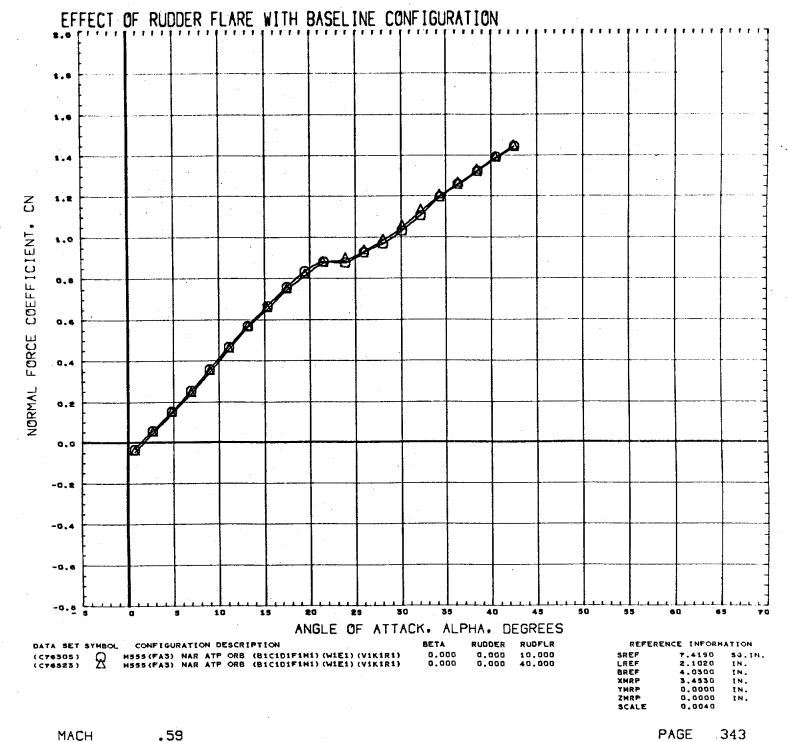
MACH

2.99

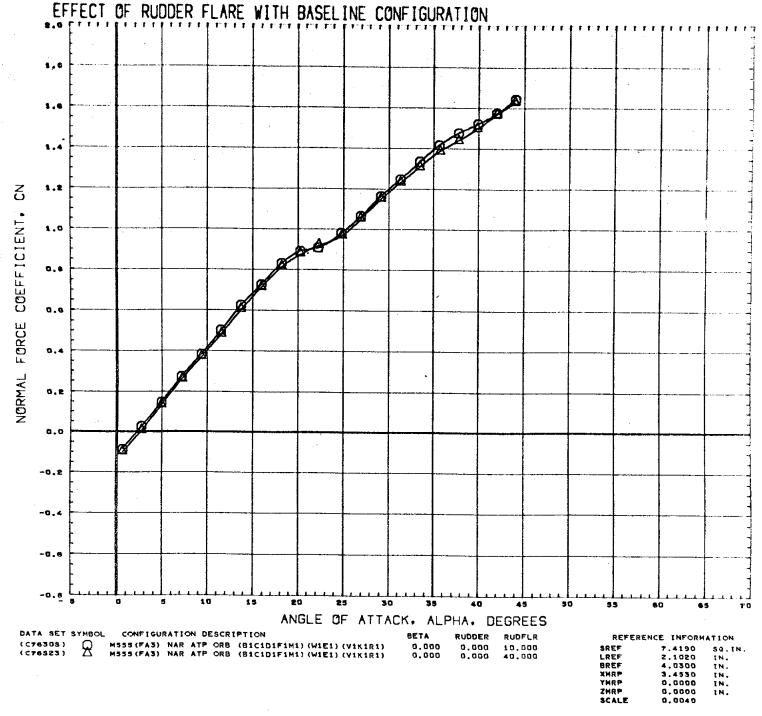


MACH

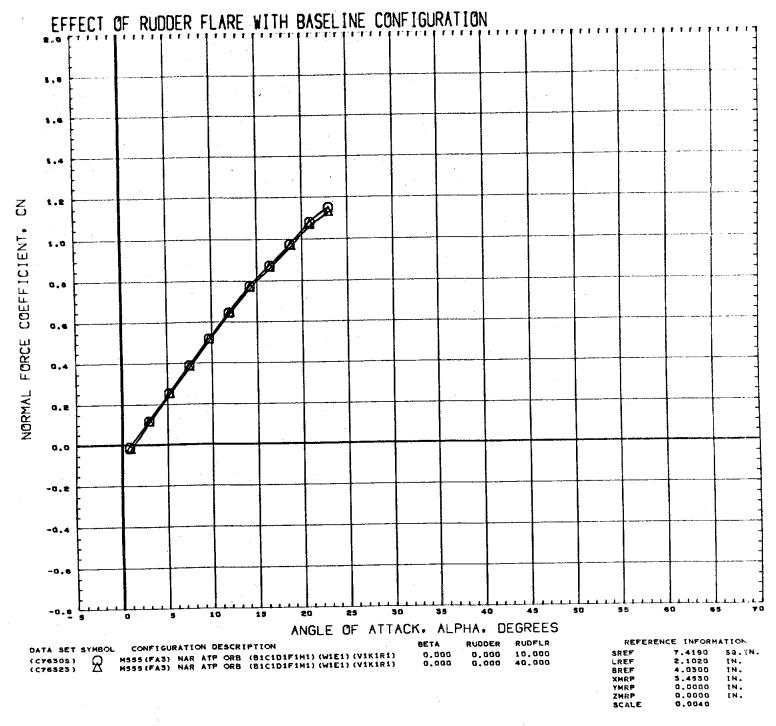
4.96



PAGE .343

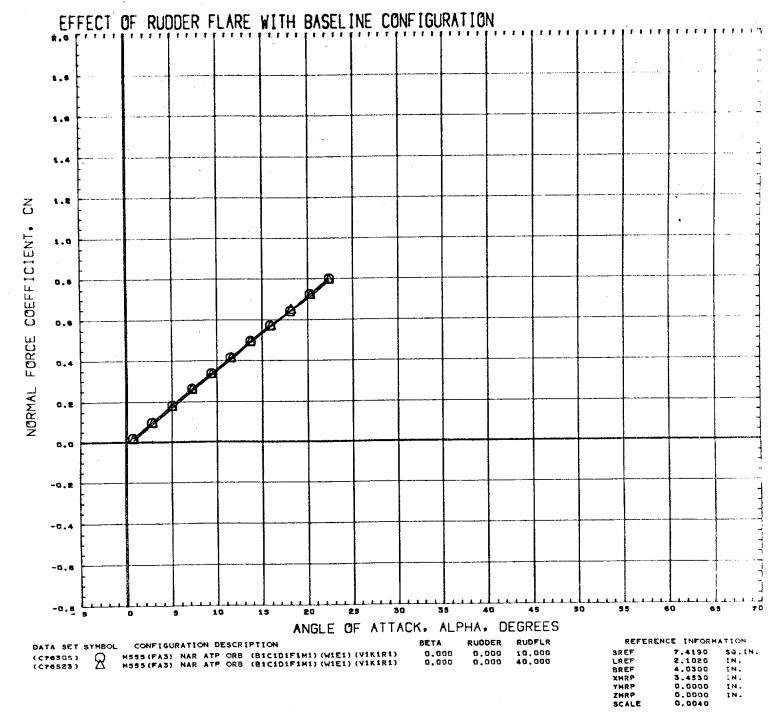


MACH .90

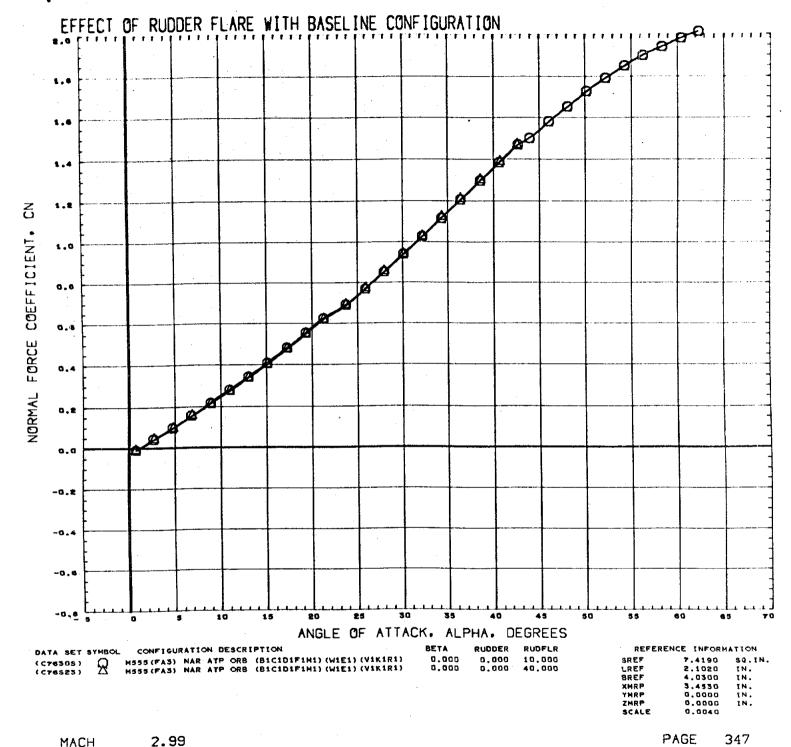


1.20

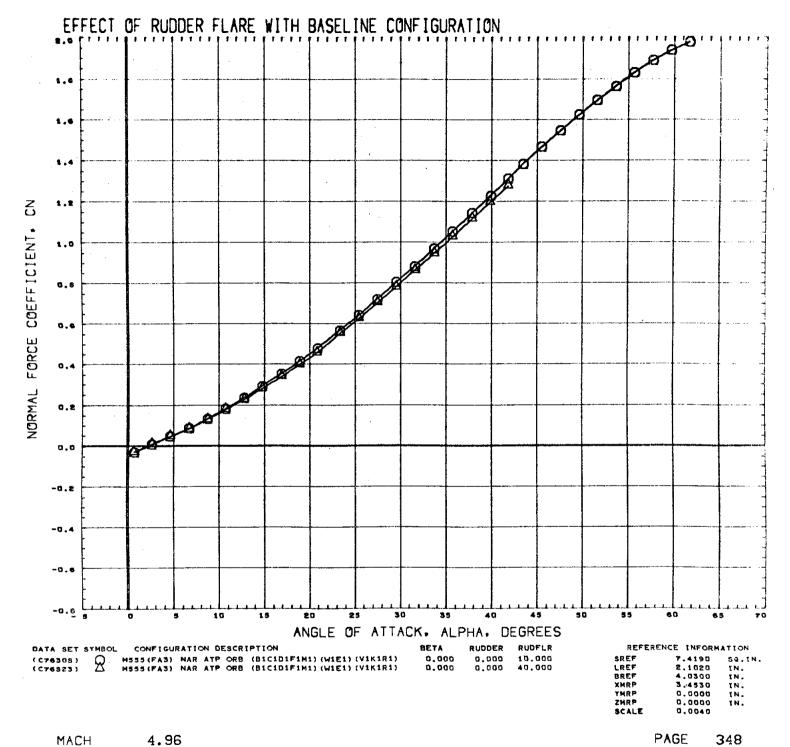
MACH

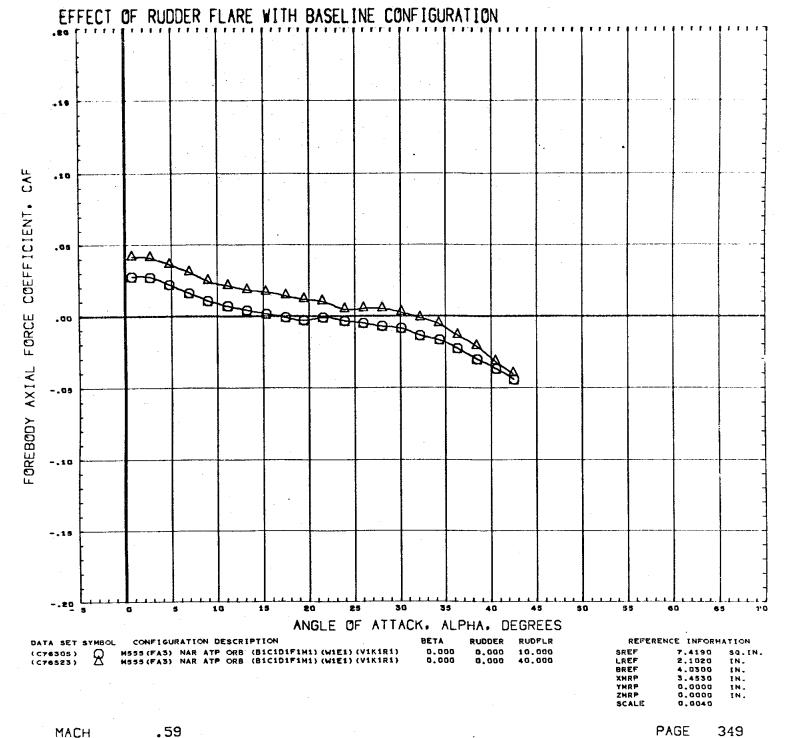


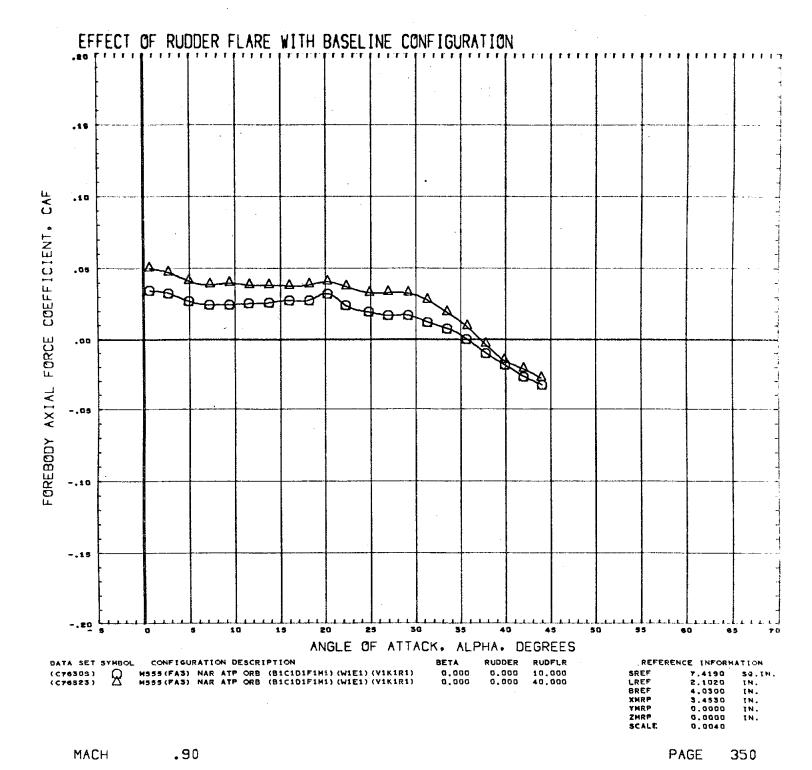
MACH 1.97

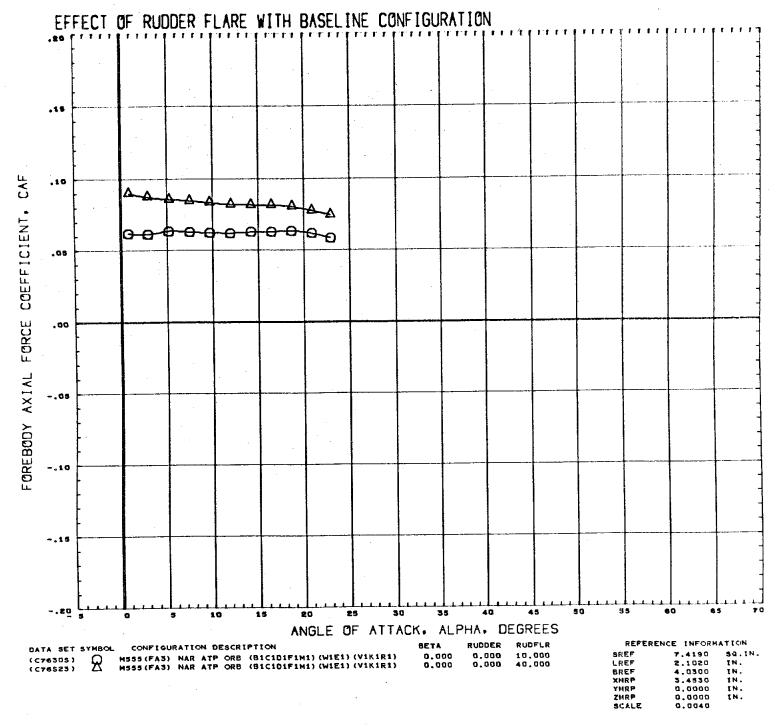


MACH



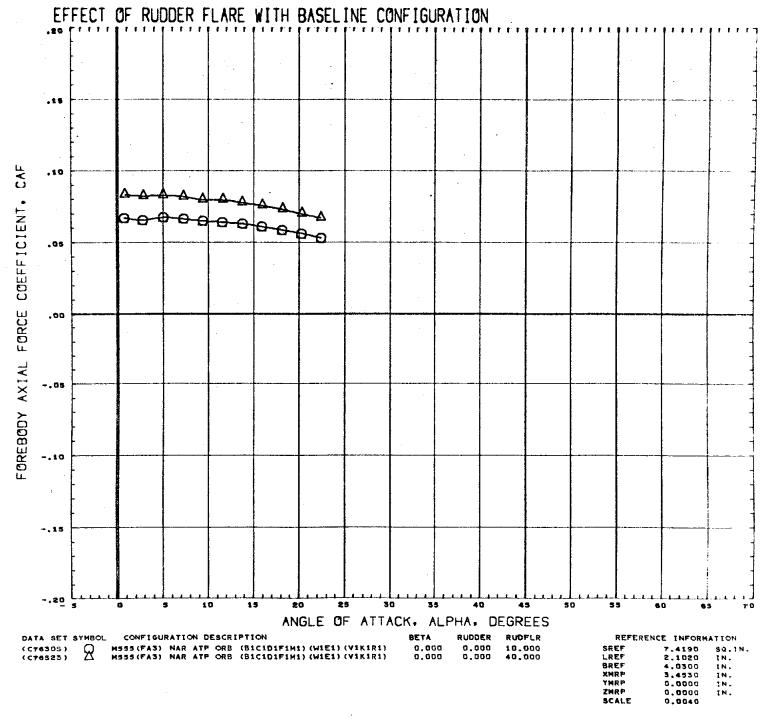




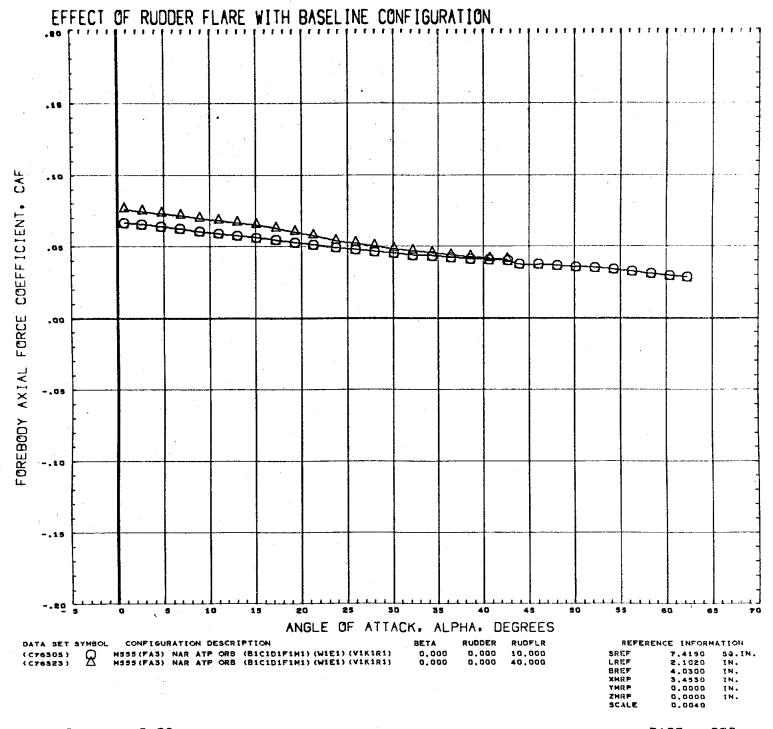


MACH

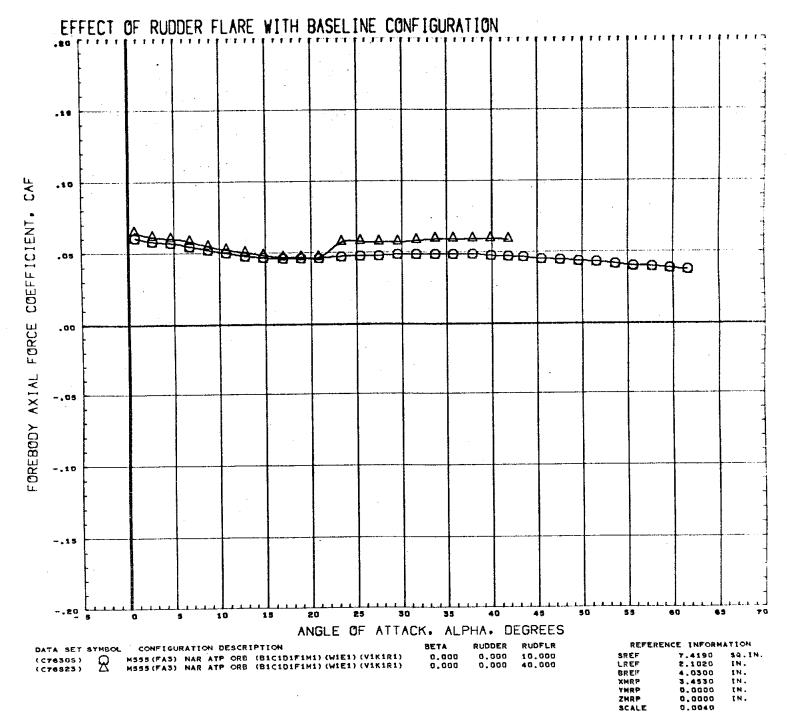
1.20



MACH 1.97

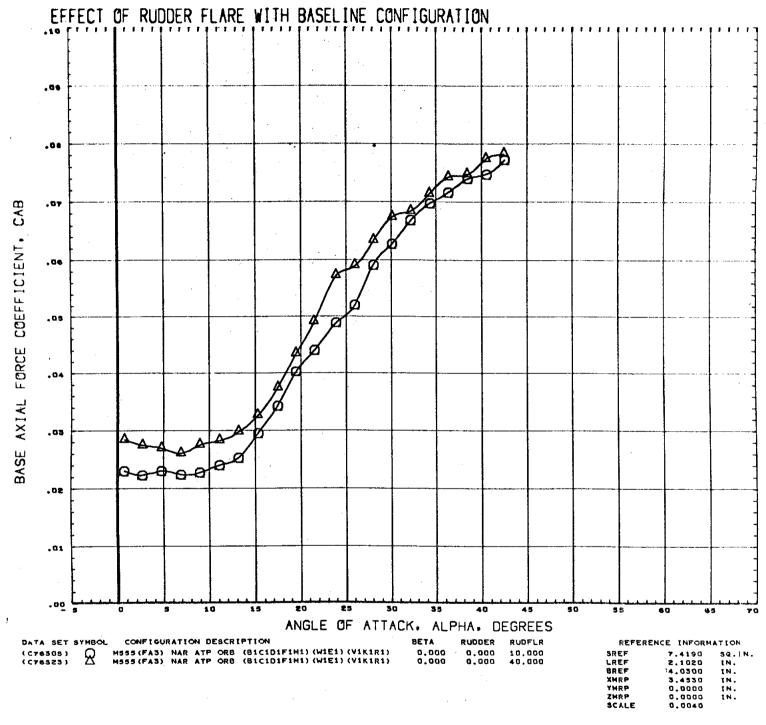


MACH 2.99

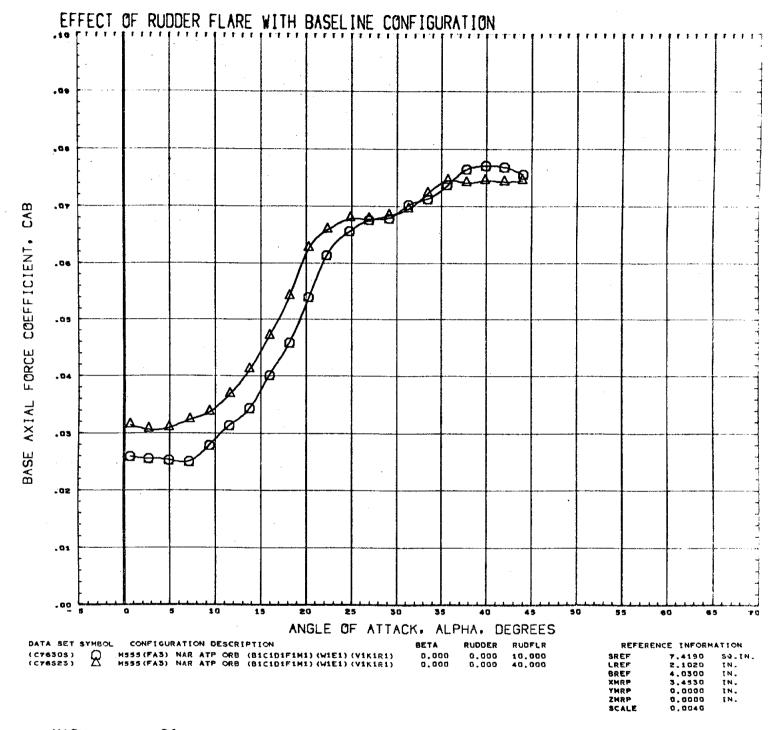


4.96

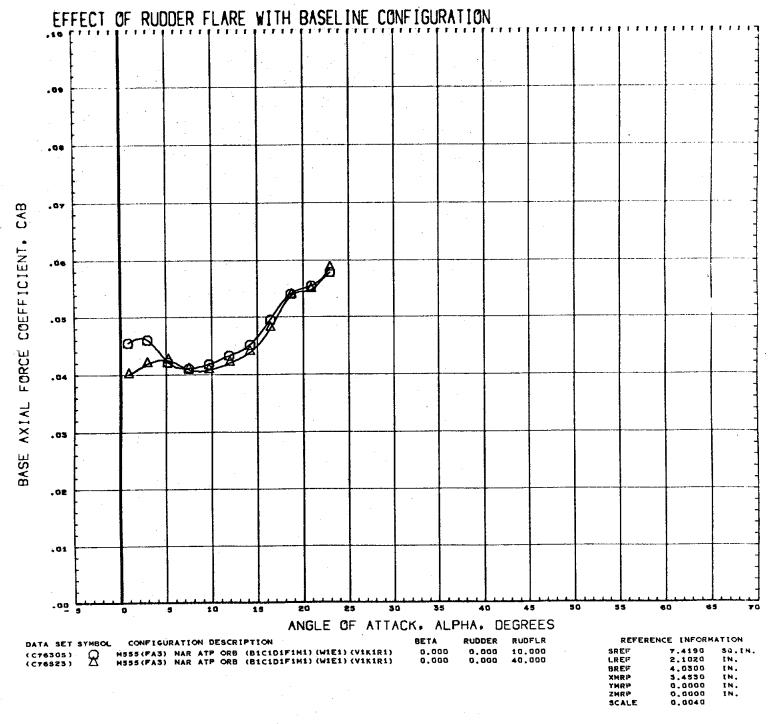
MACH



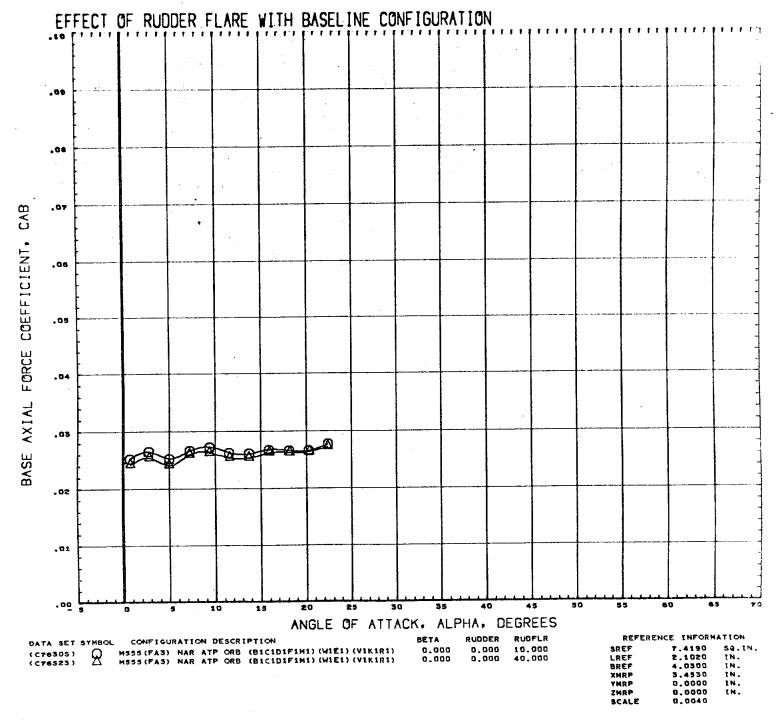
MACH .59



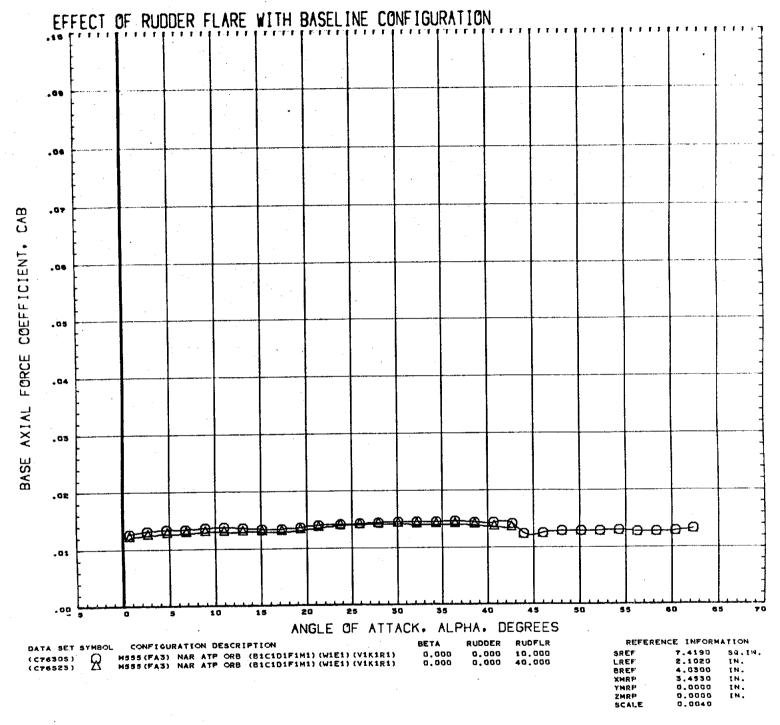
MACH .90



MACH 1.20

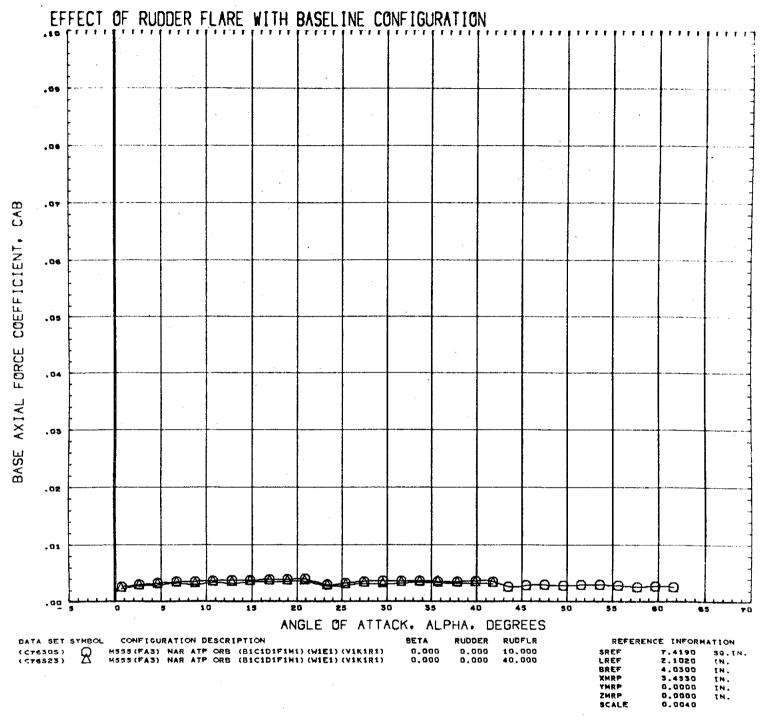


MACH 1.97

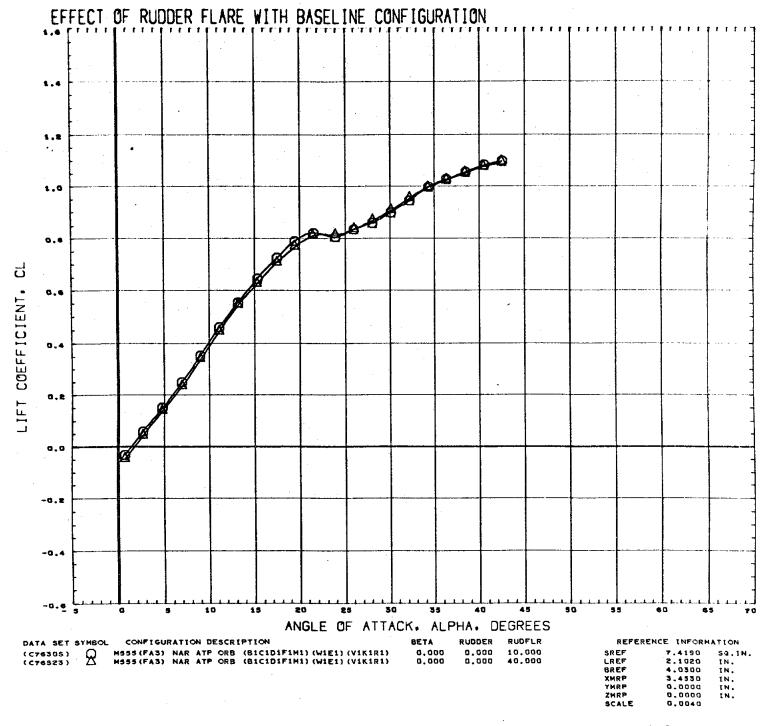


2.99

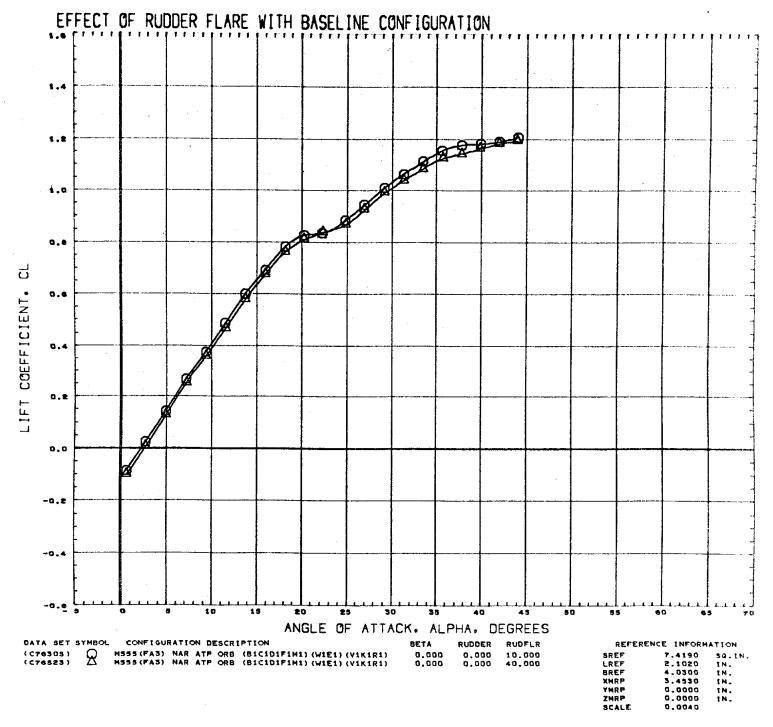
MACH



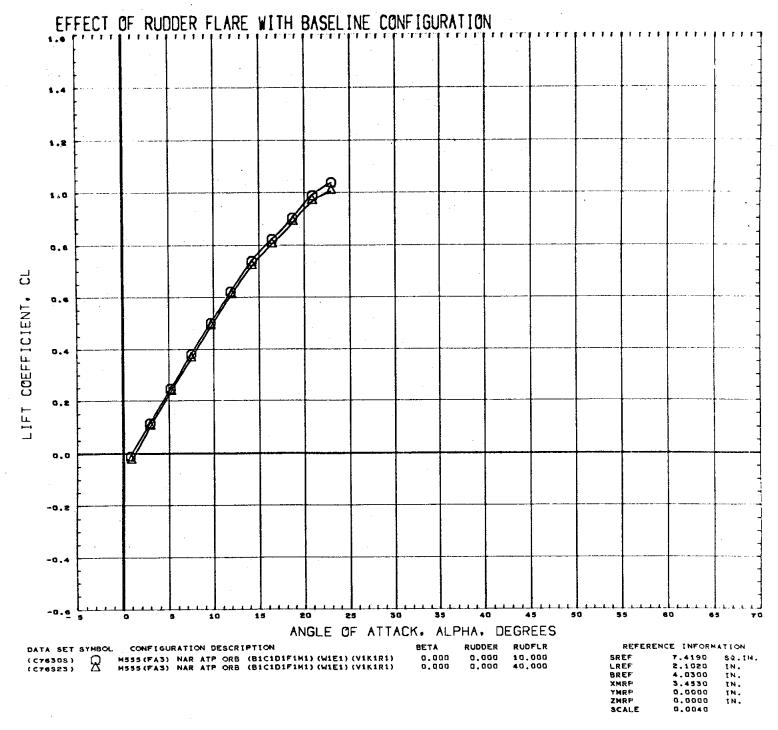
MACH 4.96



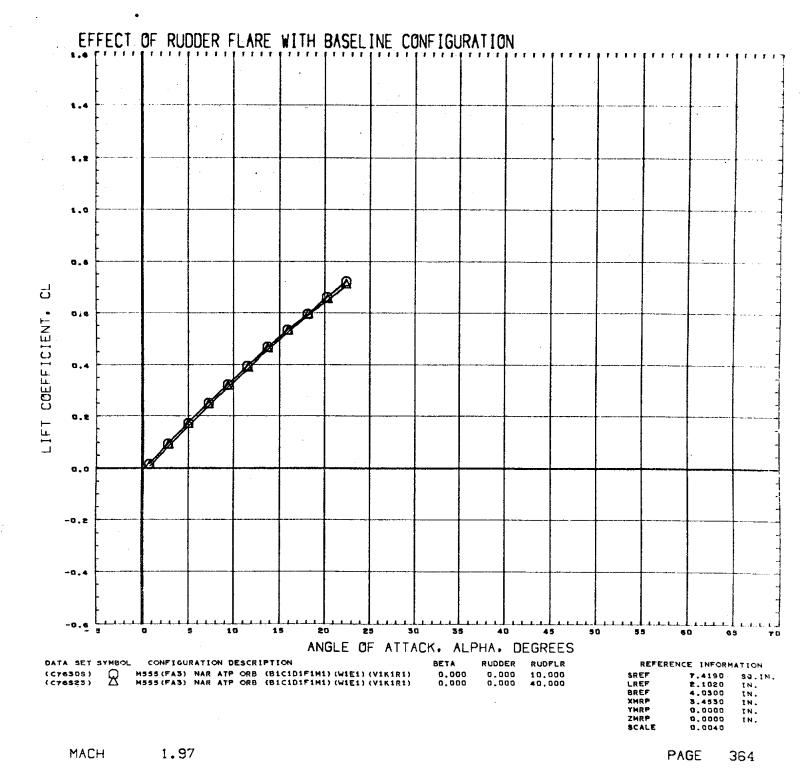
MACH .59

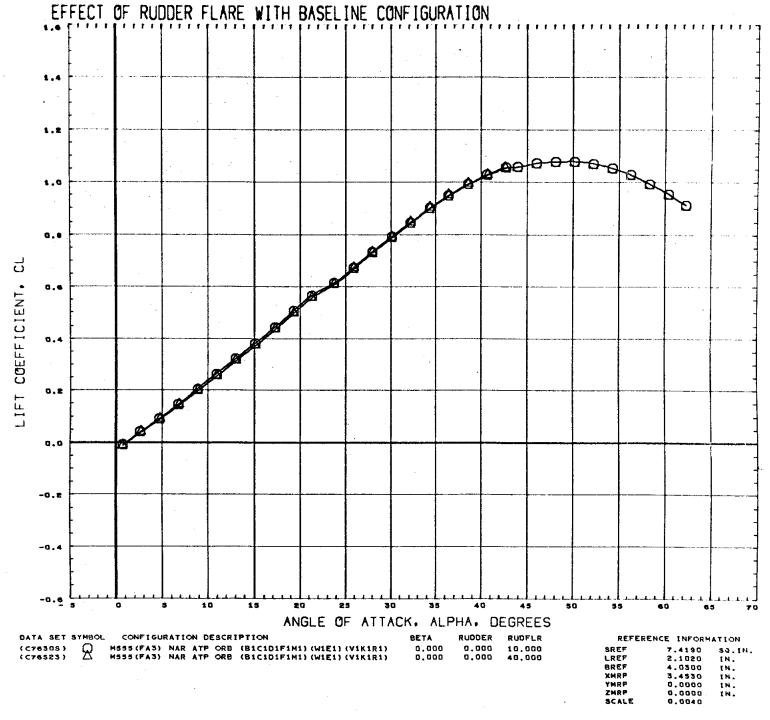


MACH .90

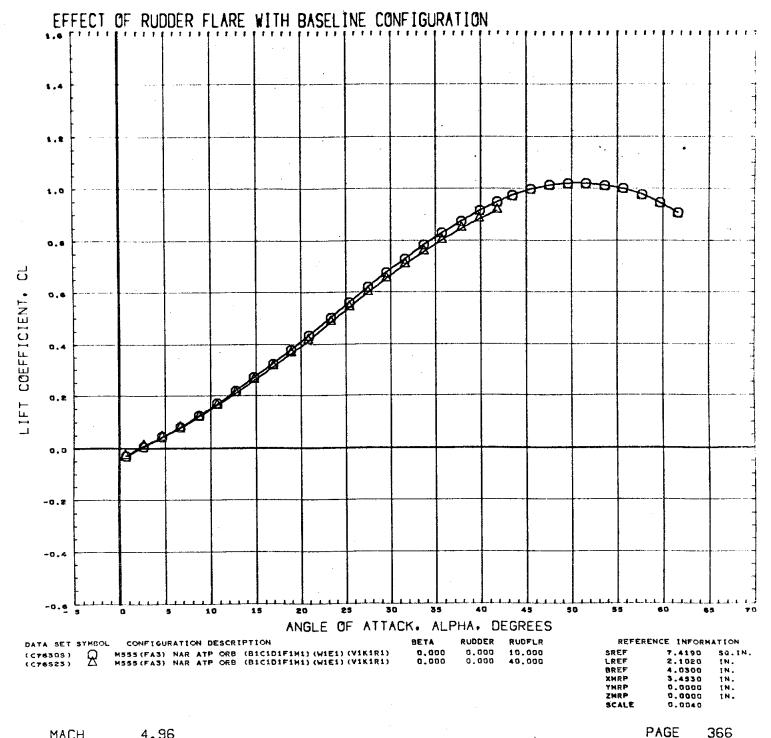


1.20



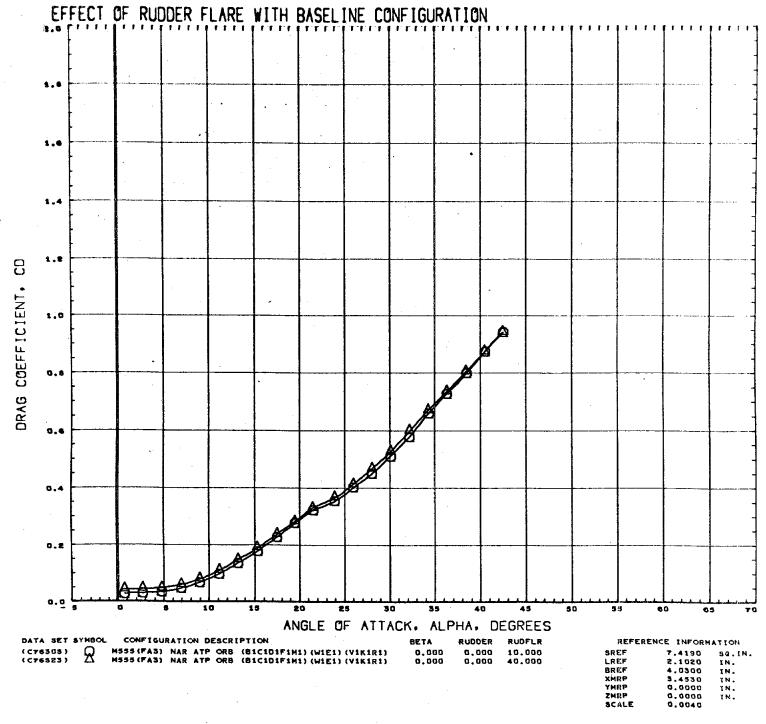


MACH 2.99

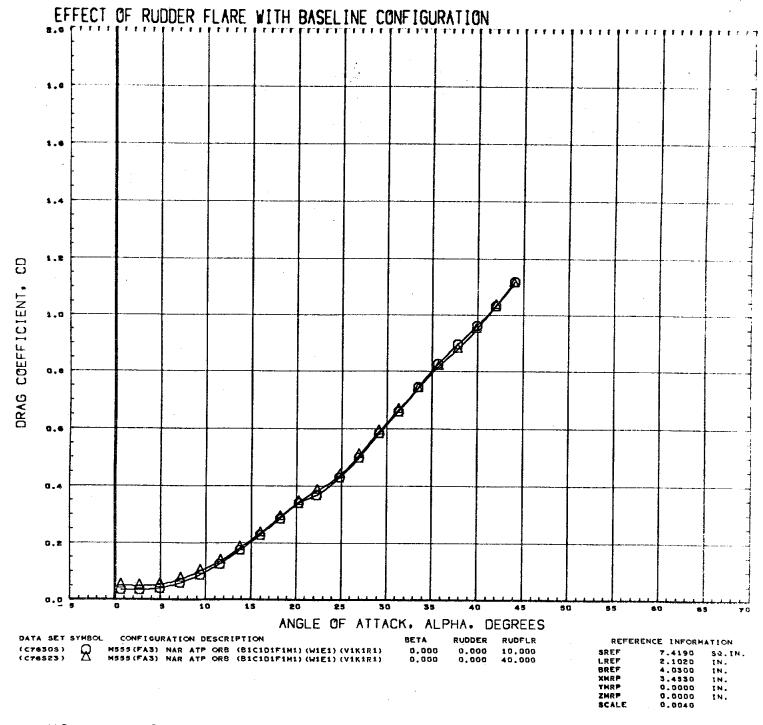


366

4.96 MACH

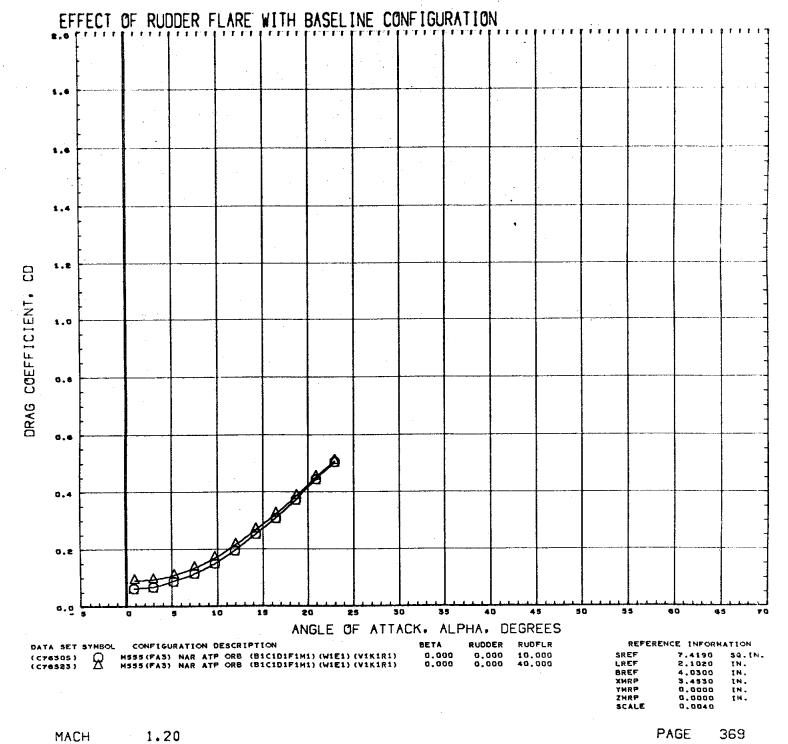


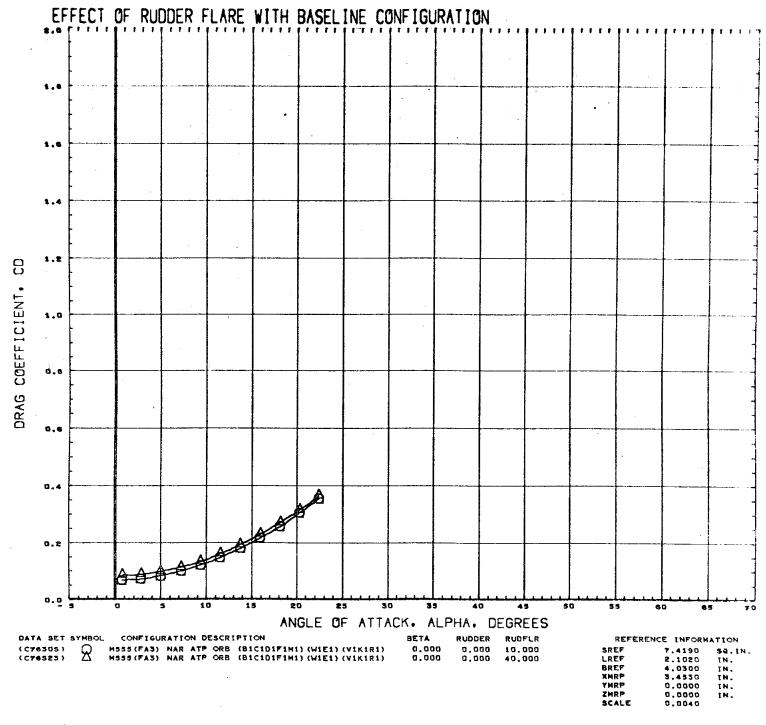
•59



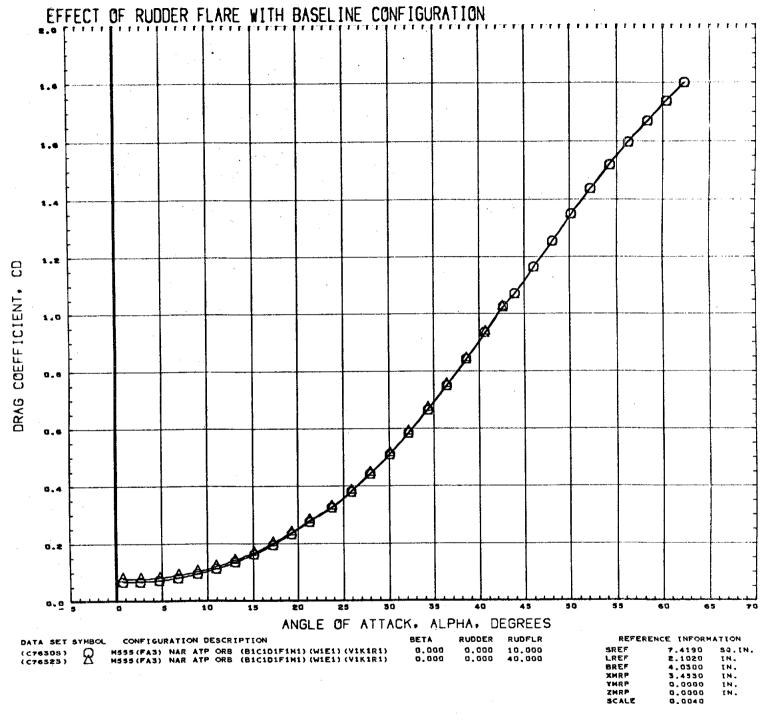
.90

PAGE

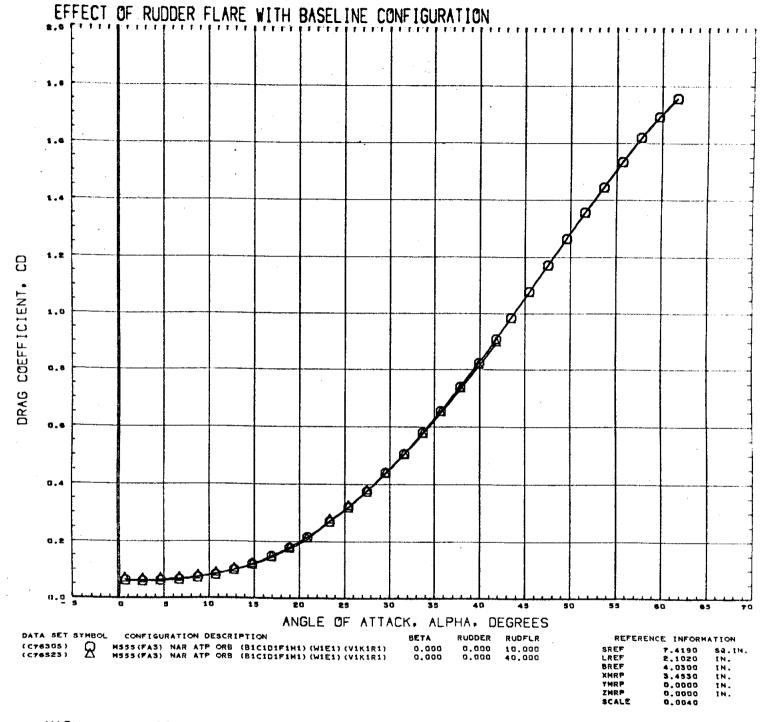




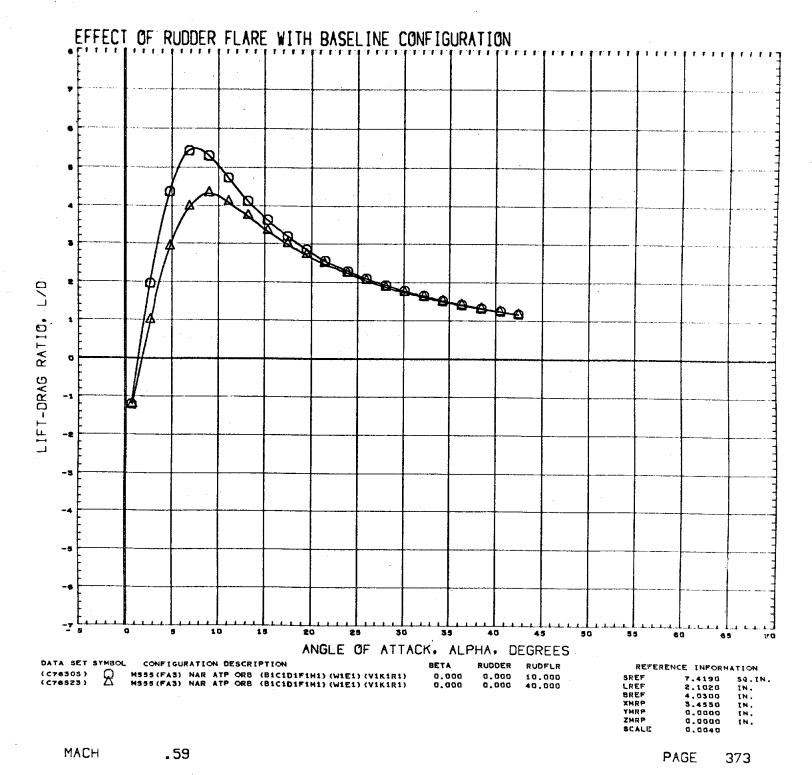
MACH 1.97

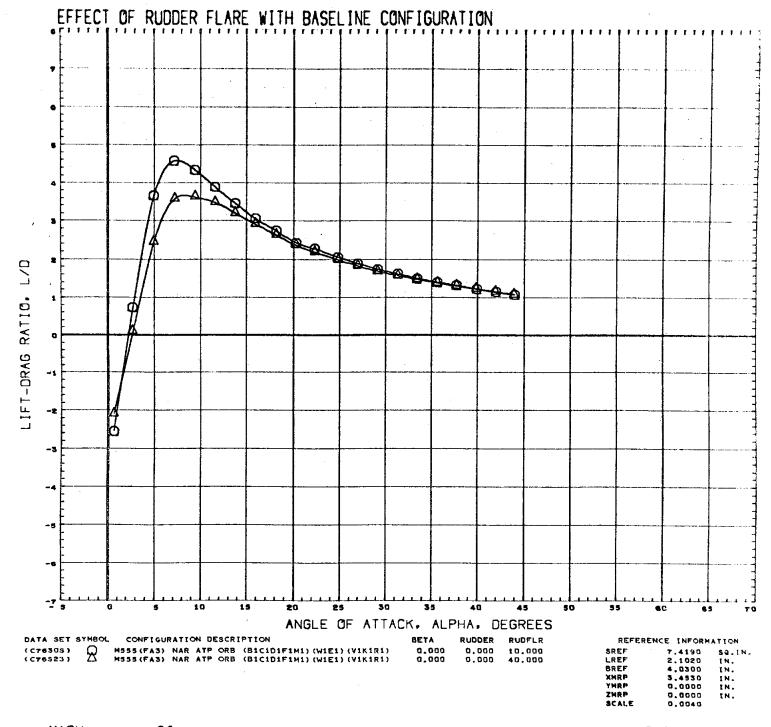


2.99

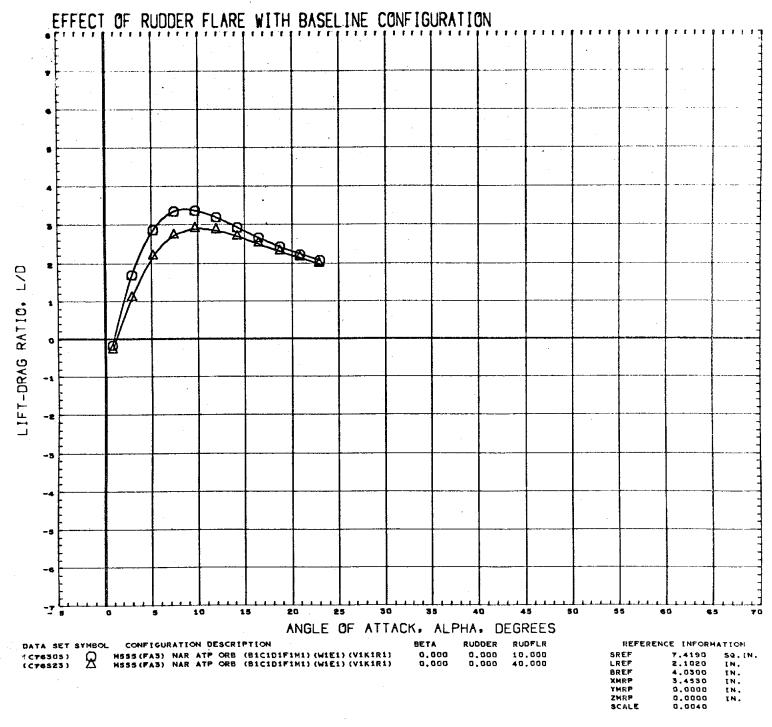


4.96



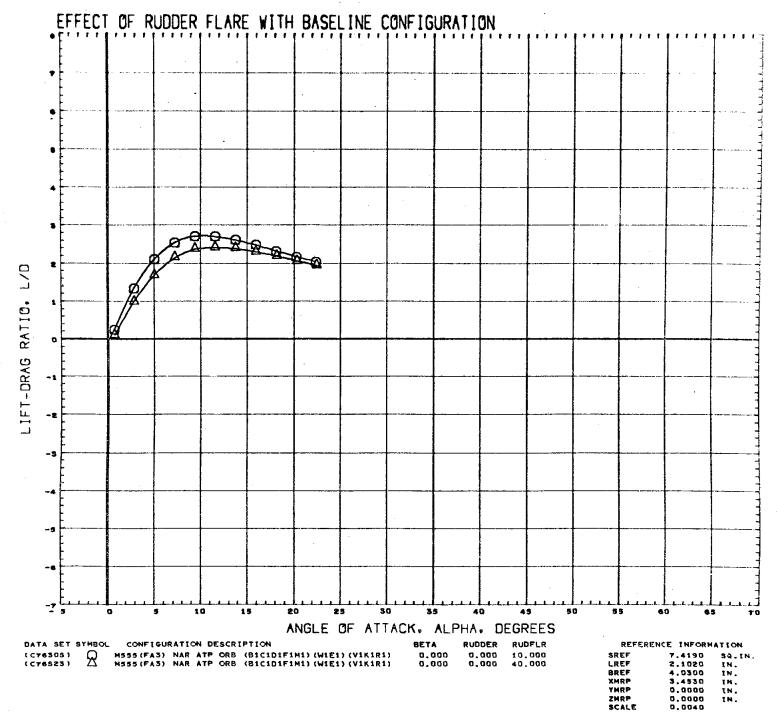


.90



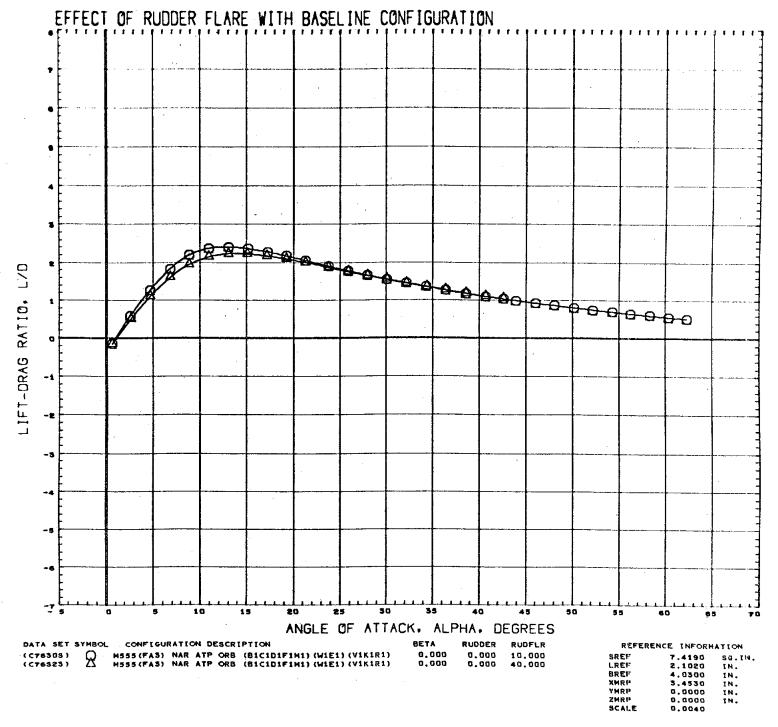
1.20

MACH



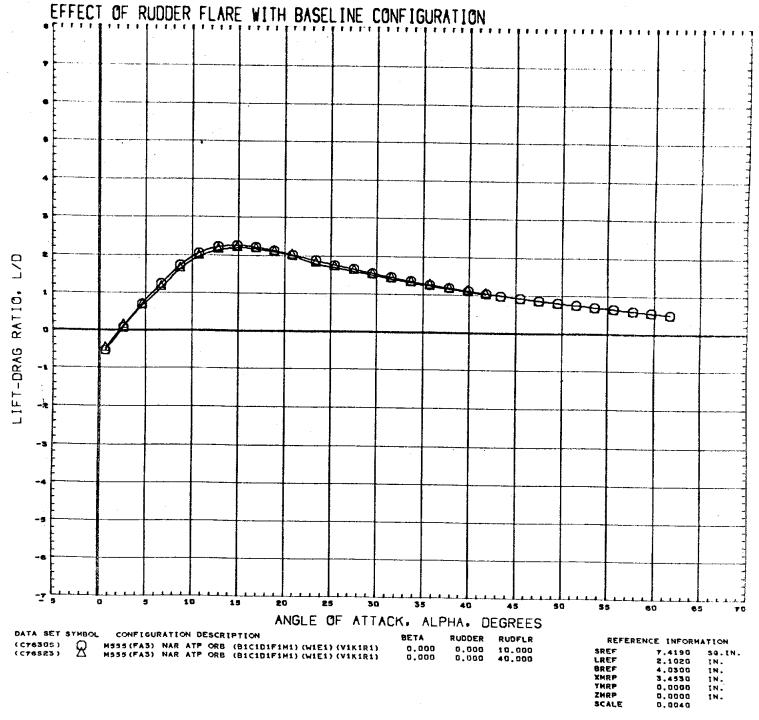
1.97

PAGE

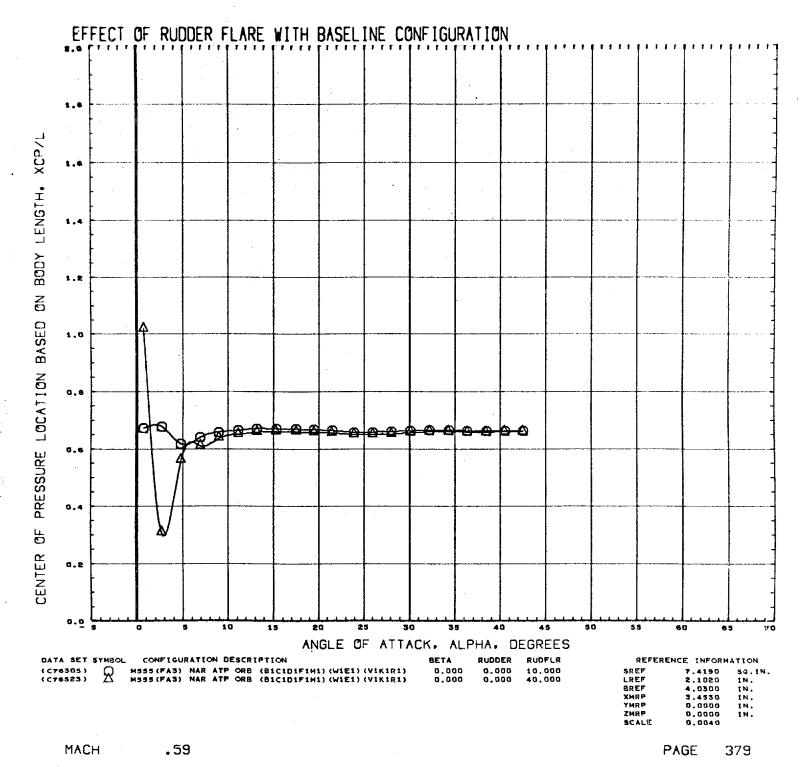


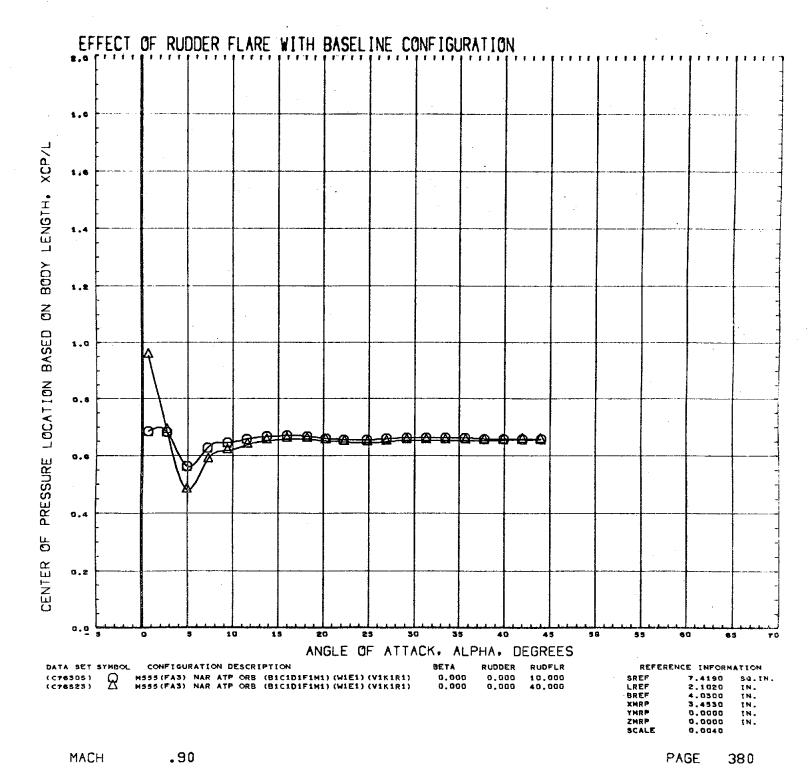
2.99

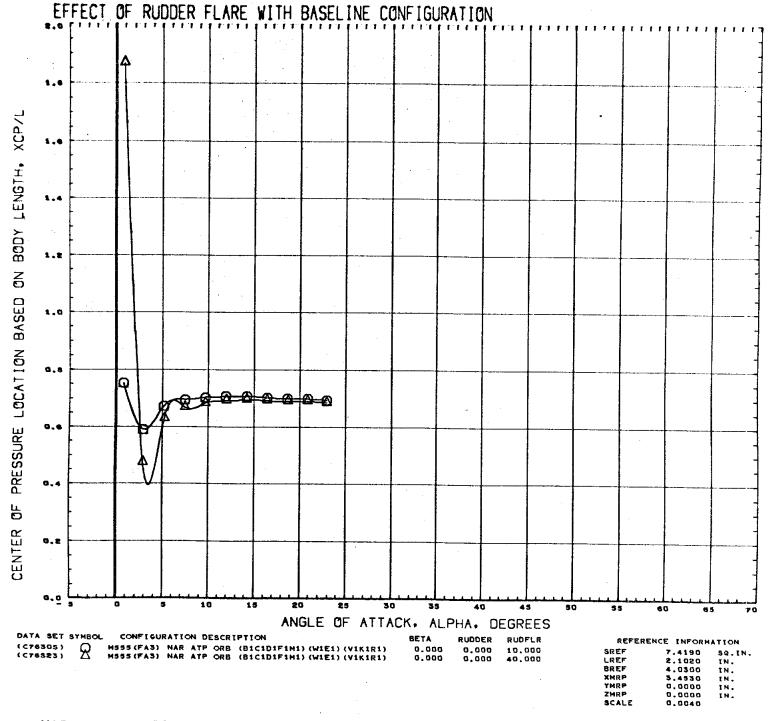
PAGE



4.96

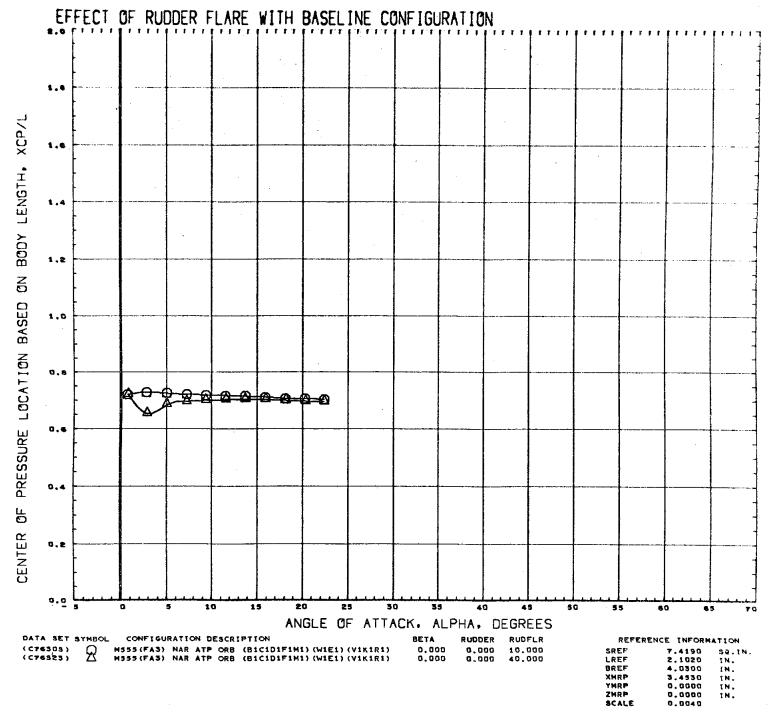




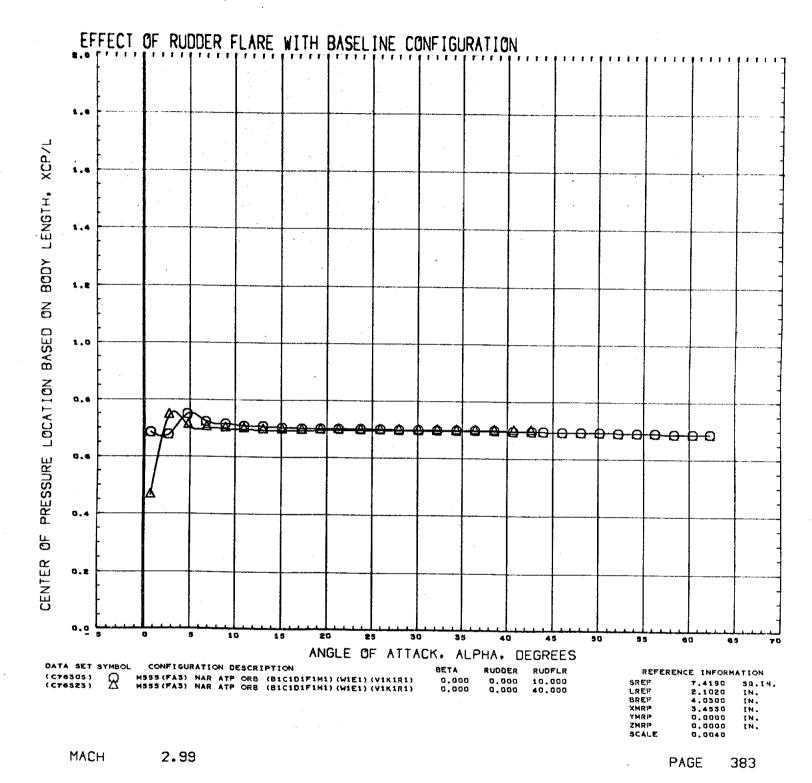


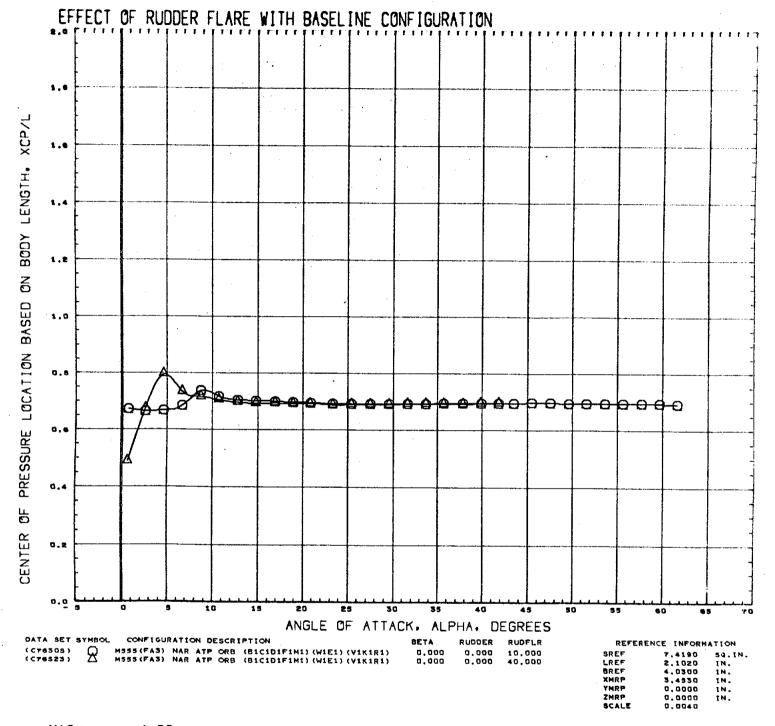
1.20

PAGE

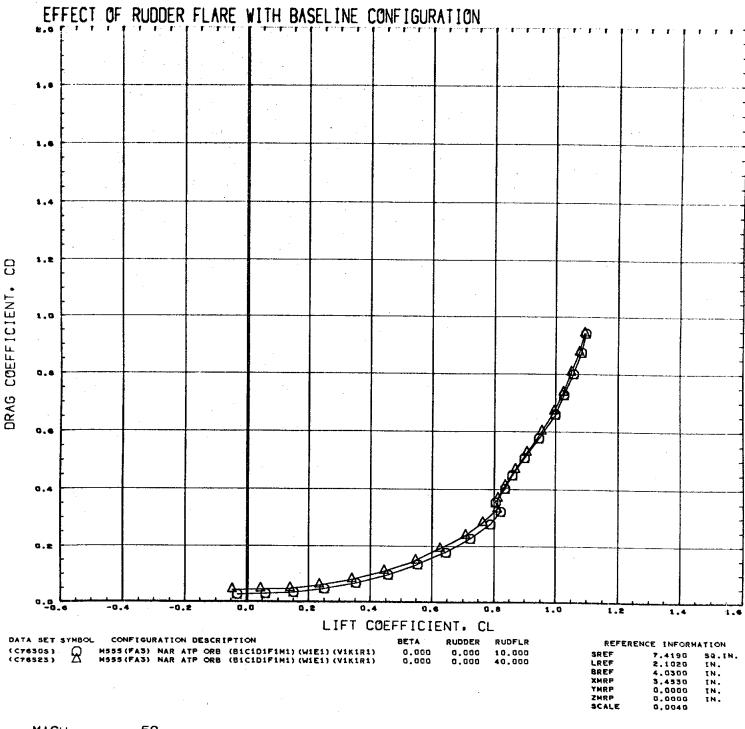


MACH 1.97



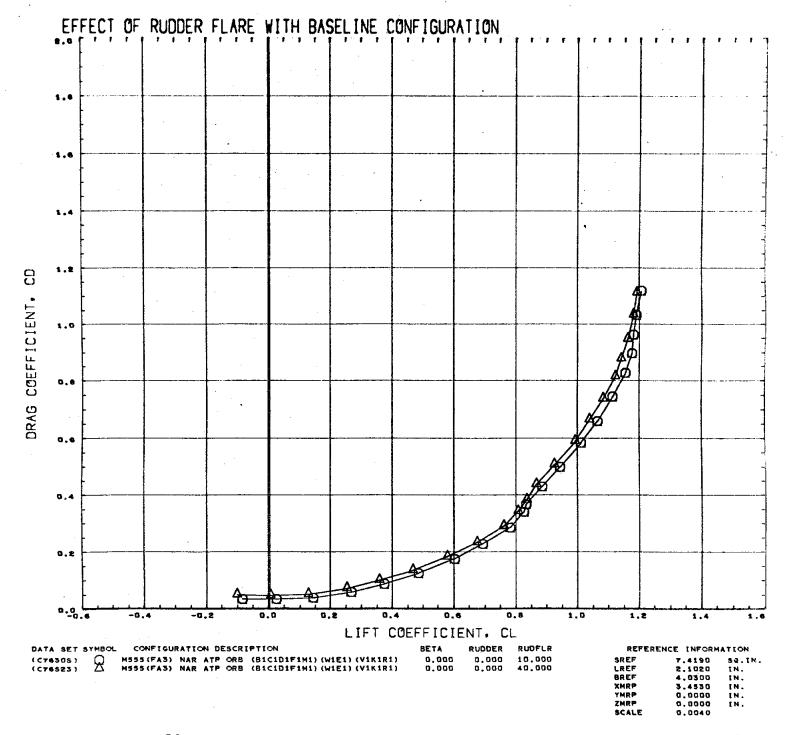


MACH 4.96



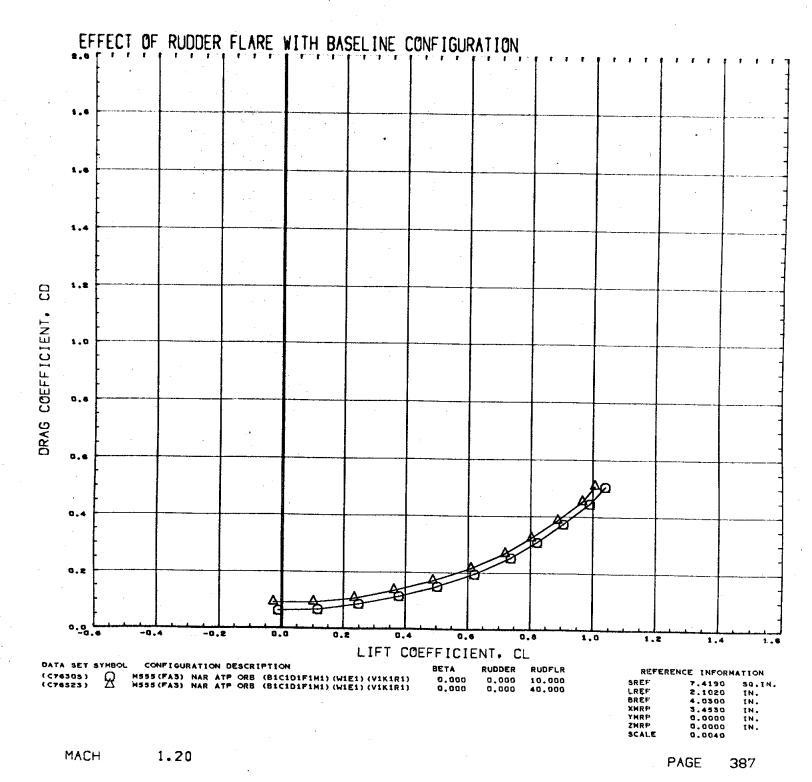
.59

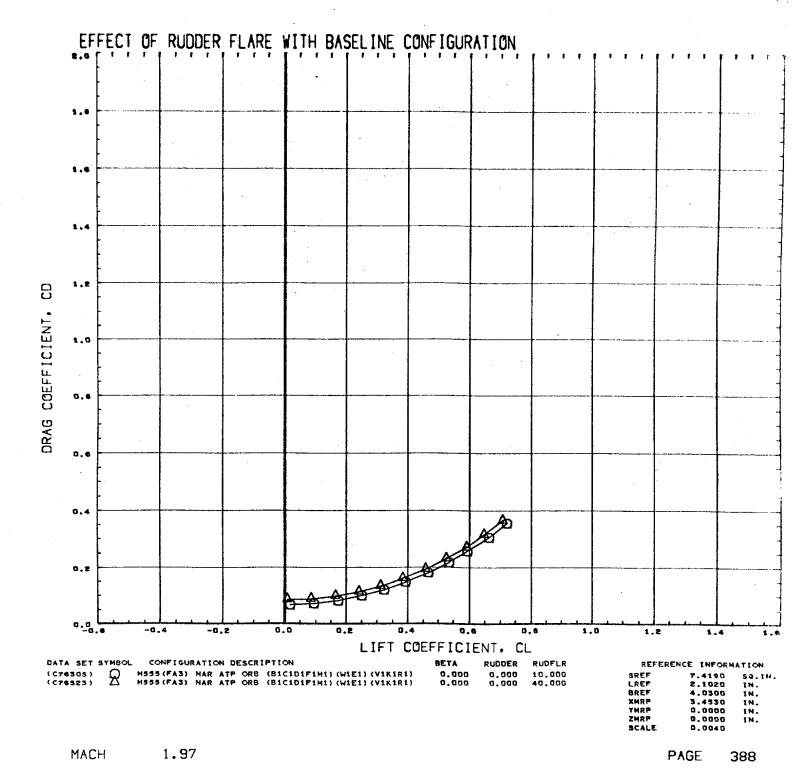
PAGE

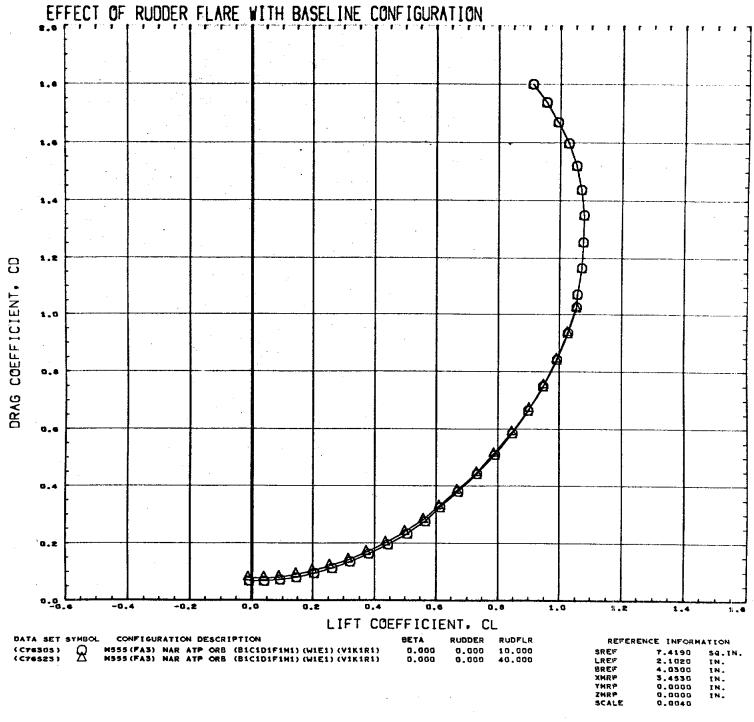


.90

PAGE

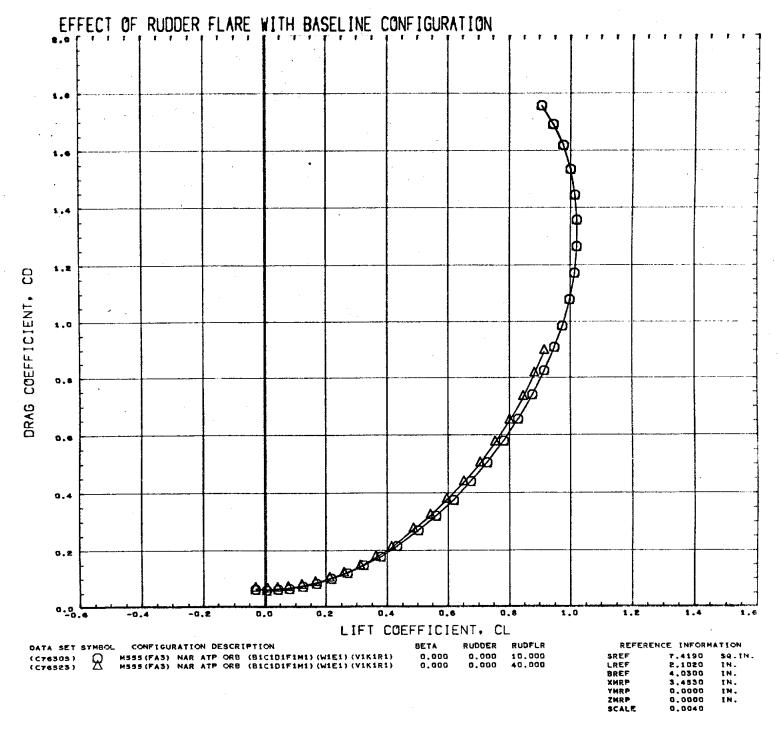






MACH 2.99

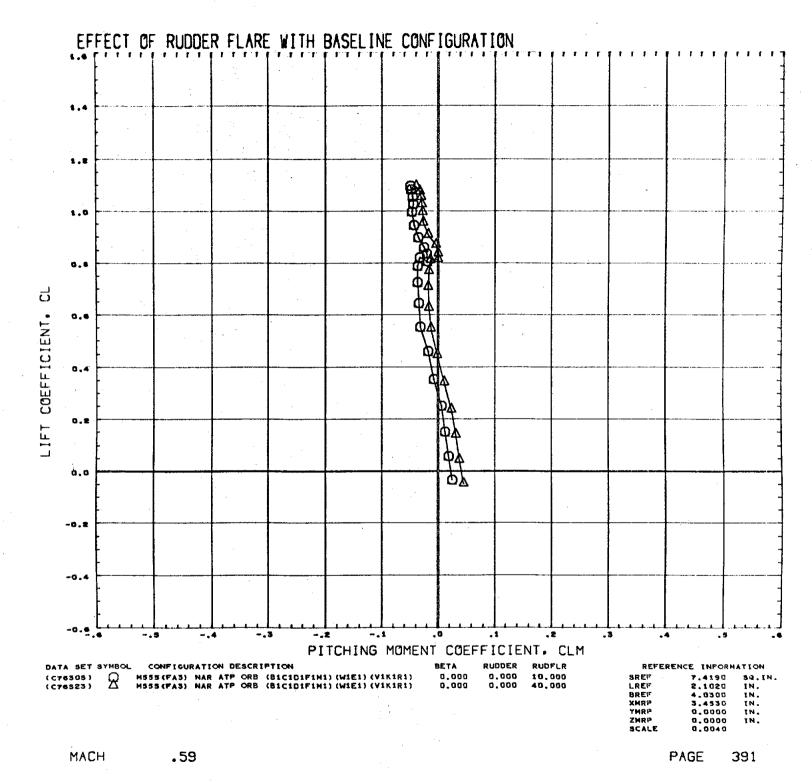
PAGE

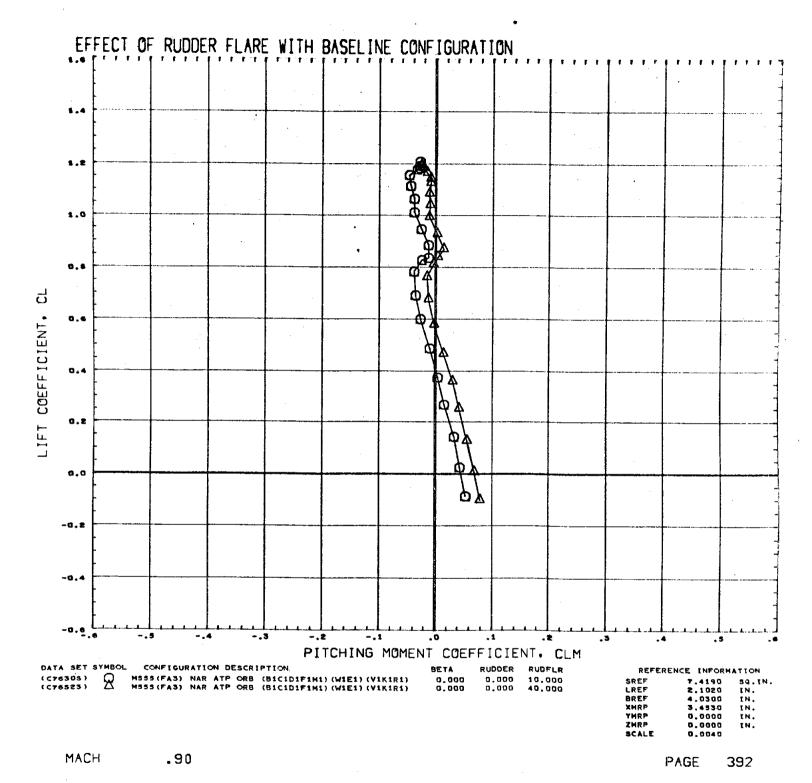


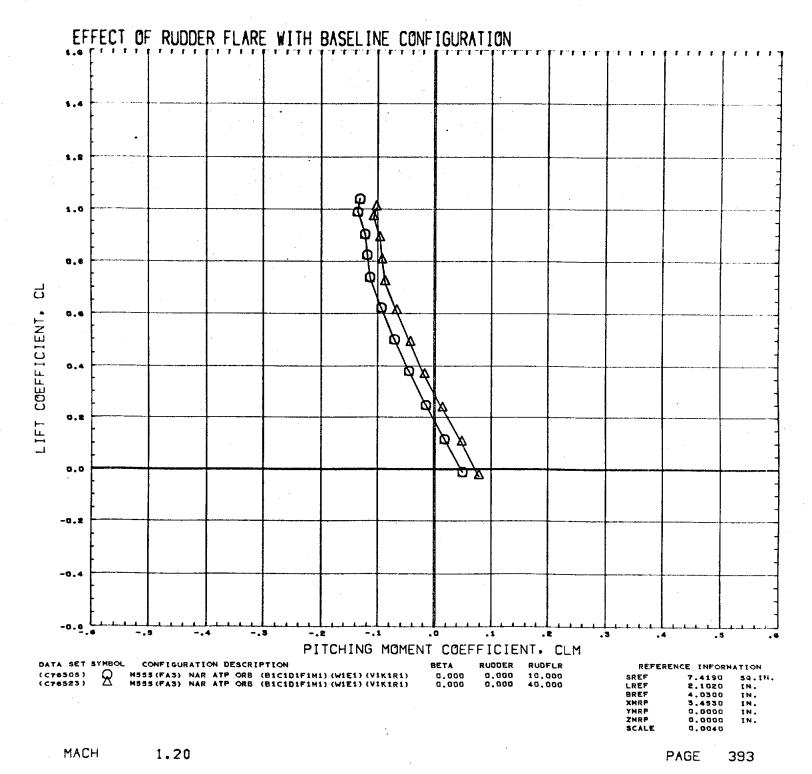
PAGE 390

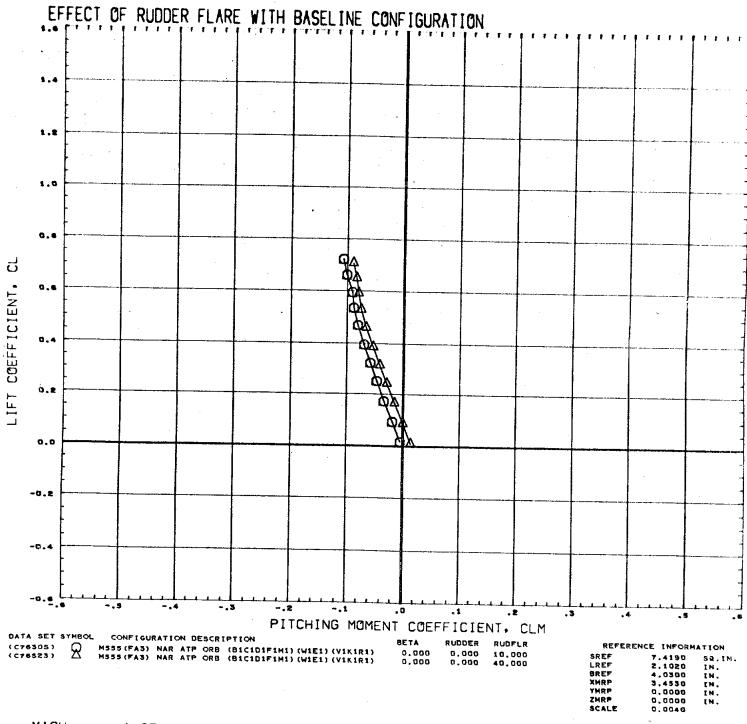
4.96

MACH



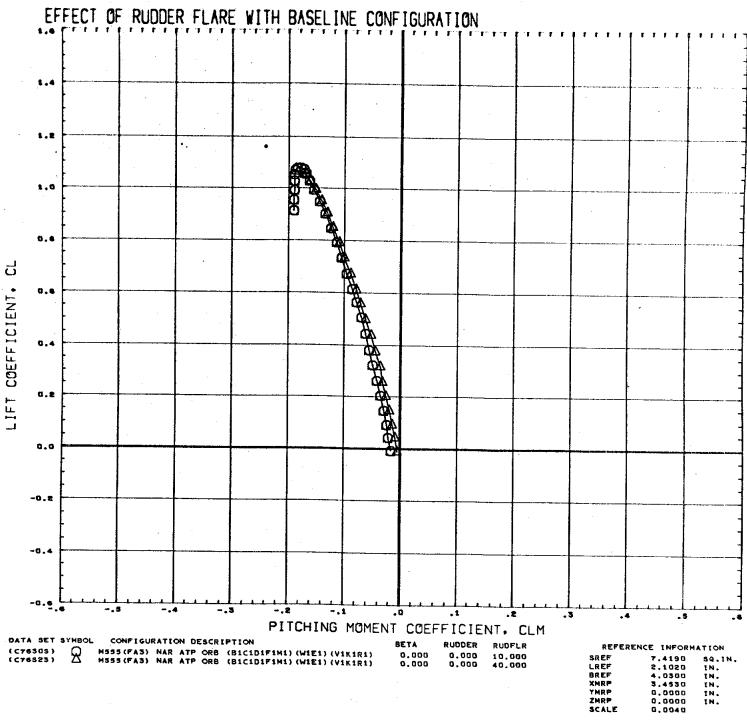




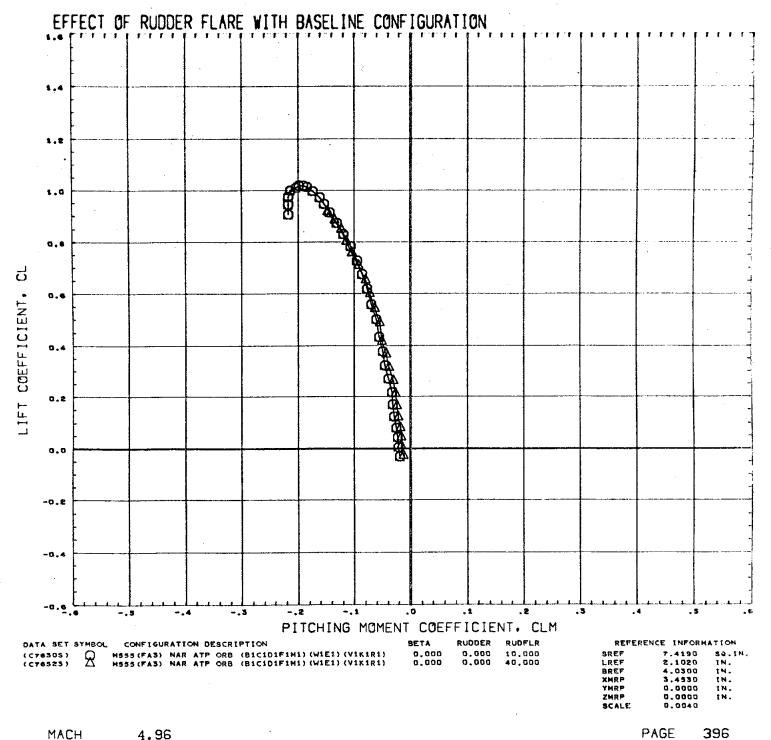


1.97

PAGE

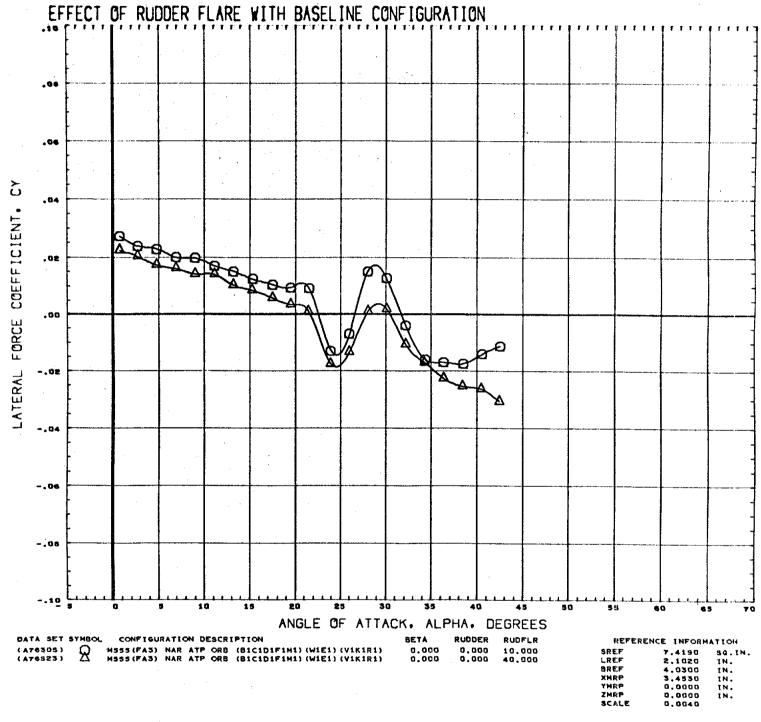


MACH 2.99



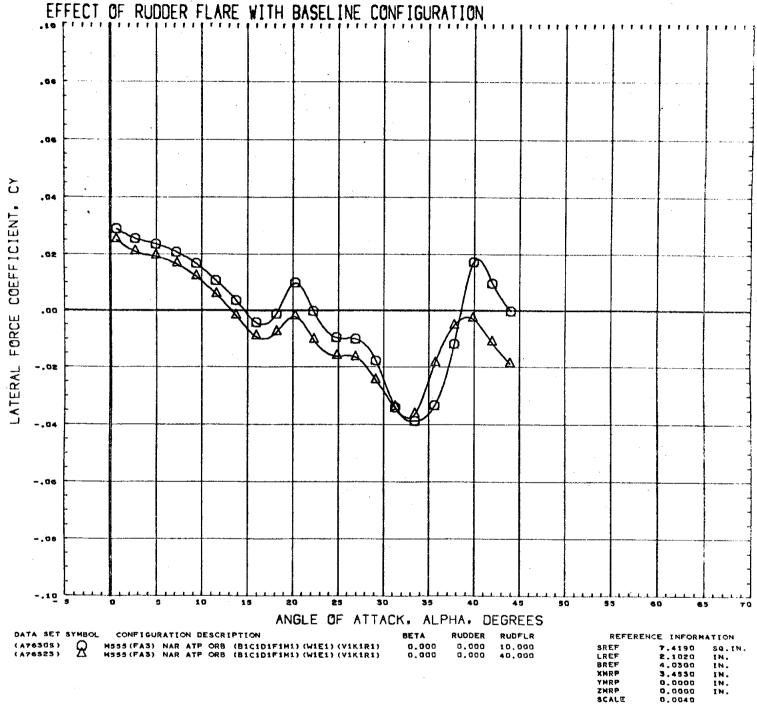
396

4.96

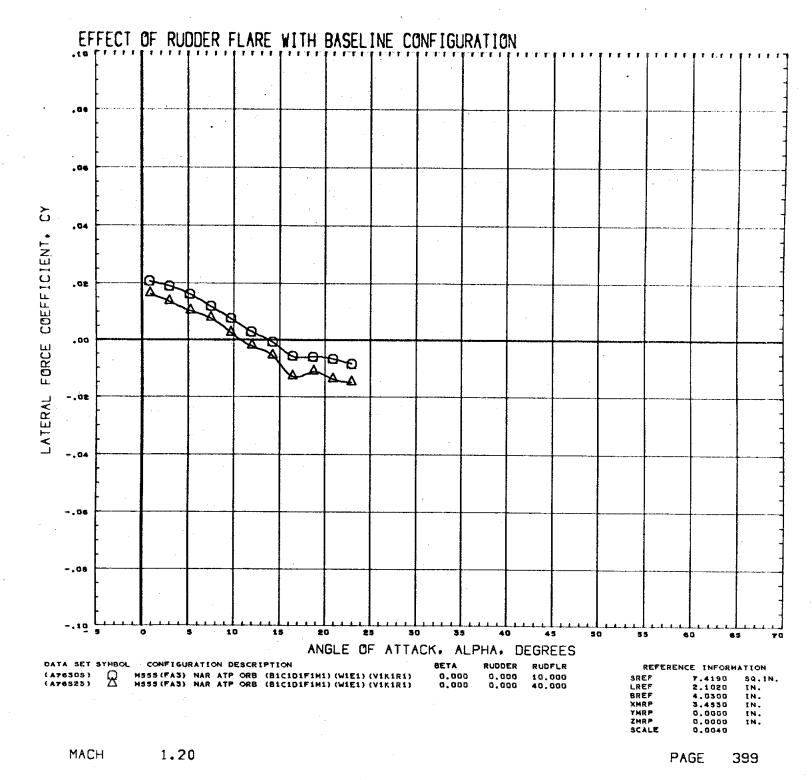


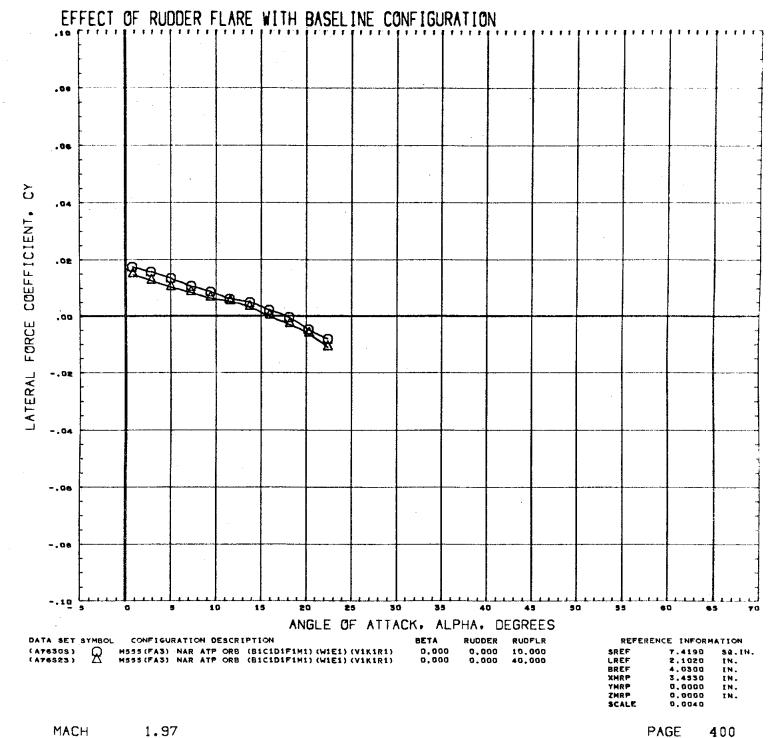
.59

PAGE

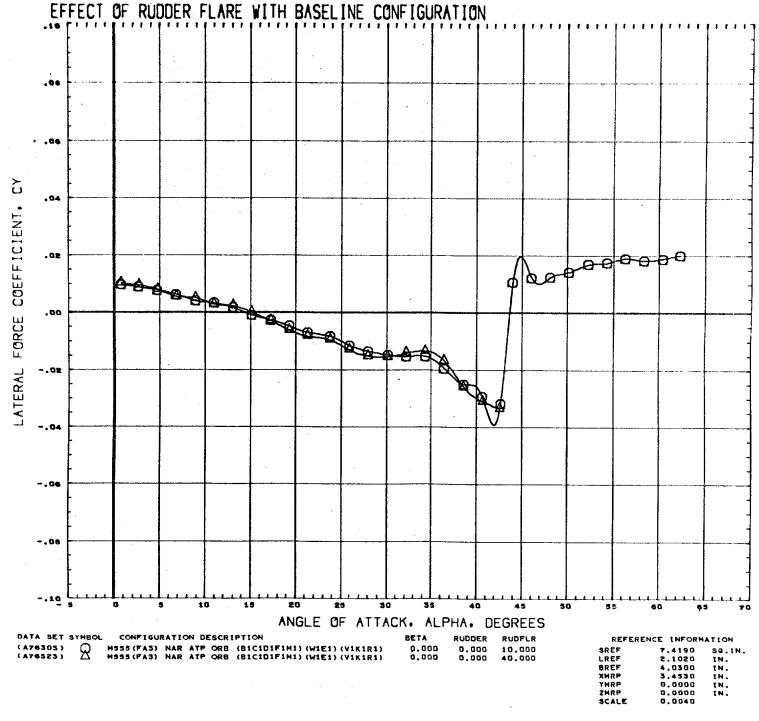


MACH .90

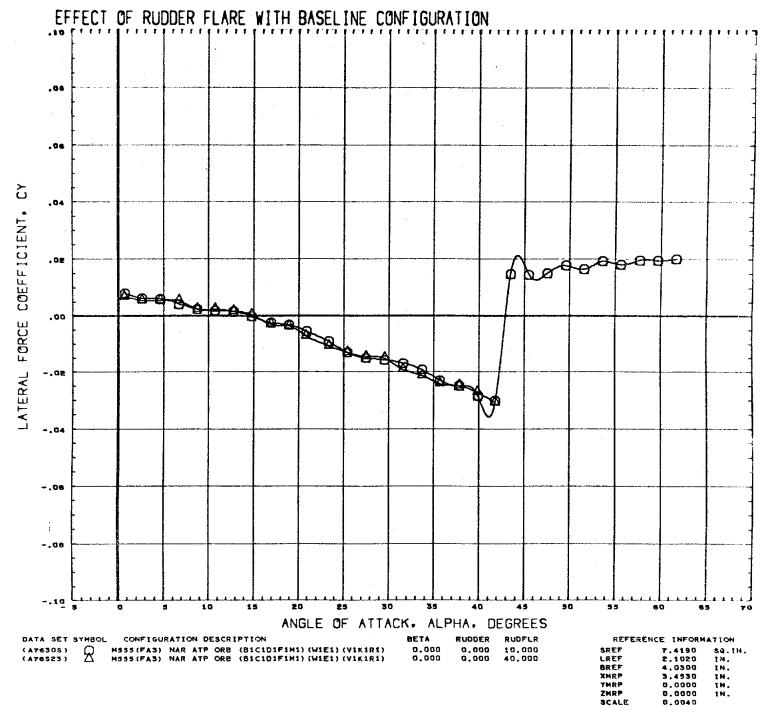




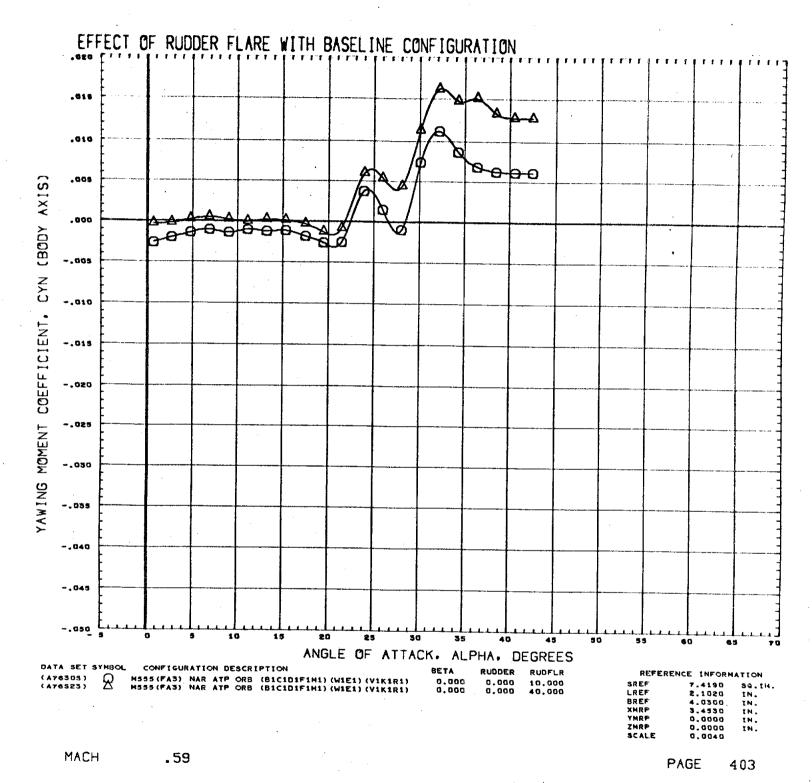
1.97

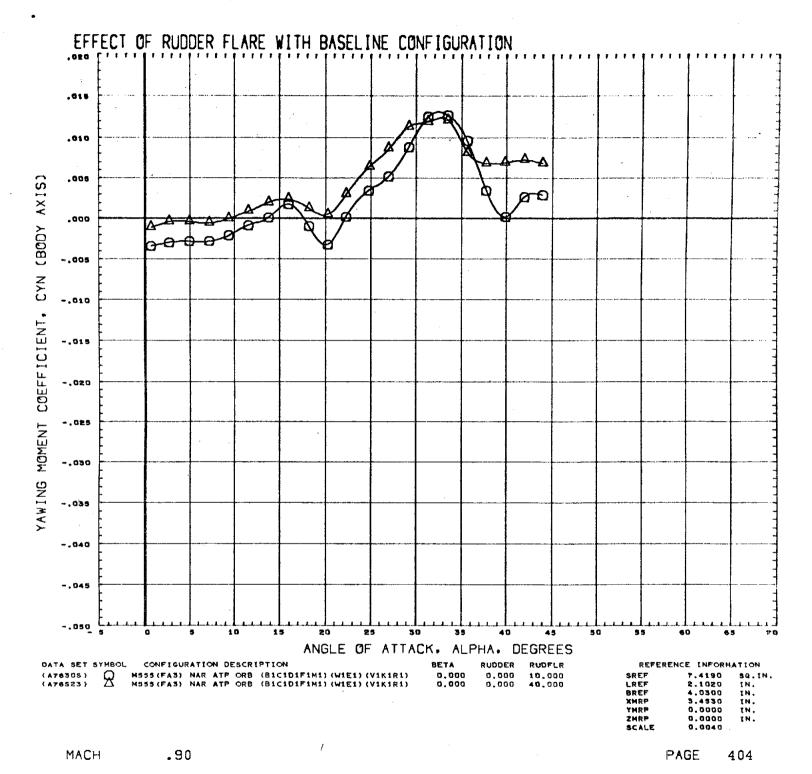


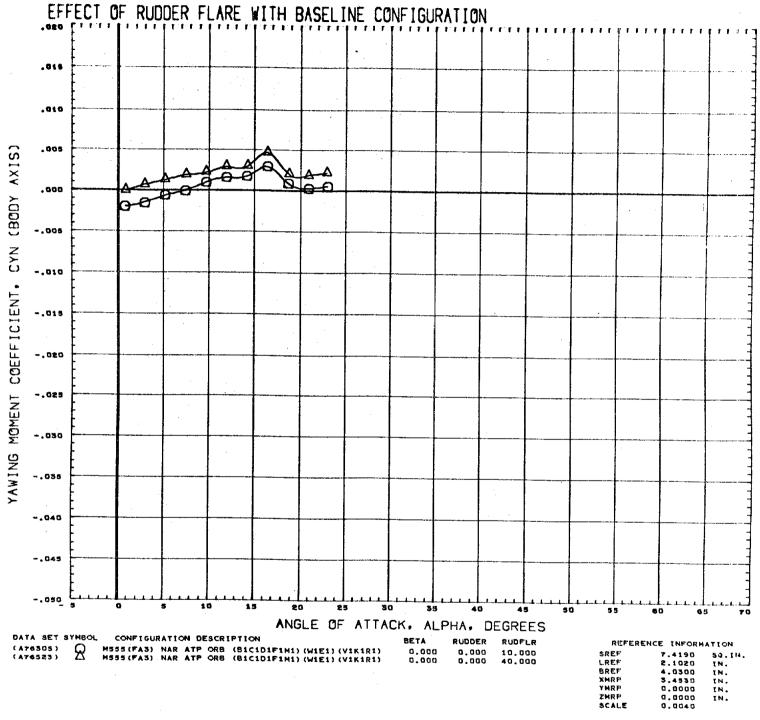
2.99



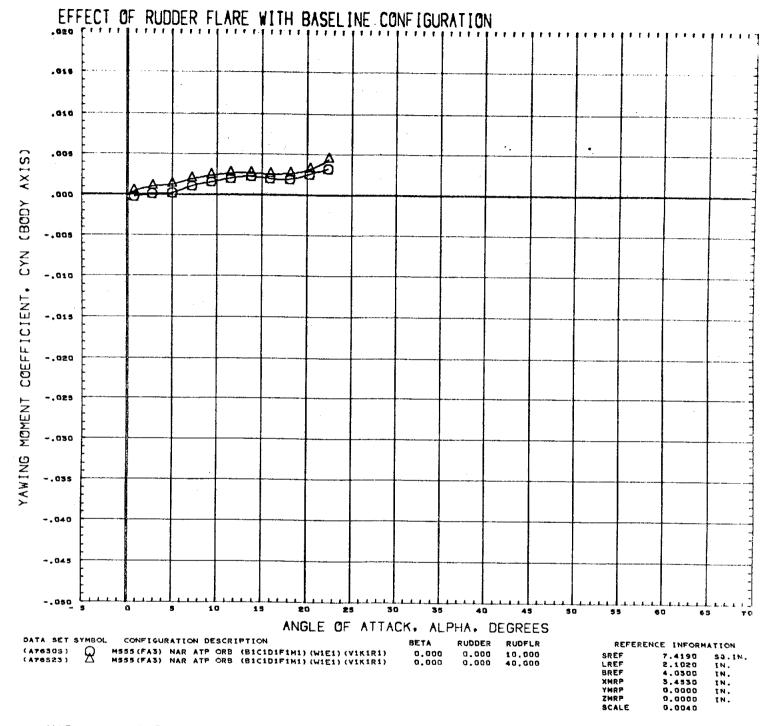
MACH 4.96



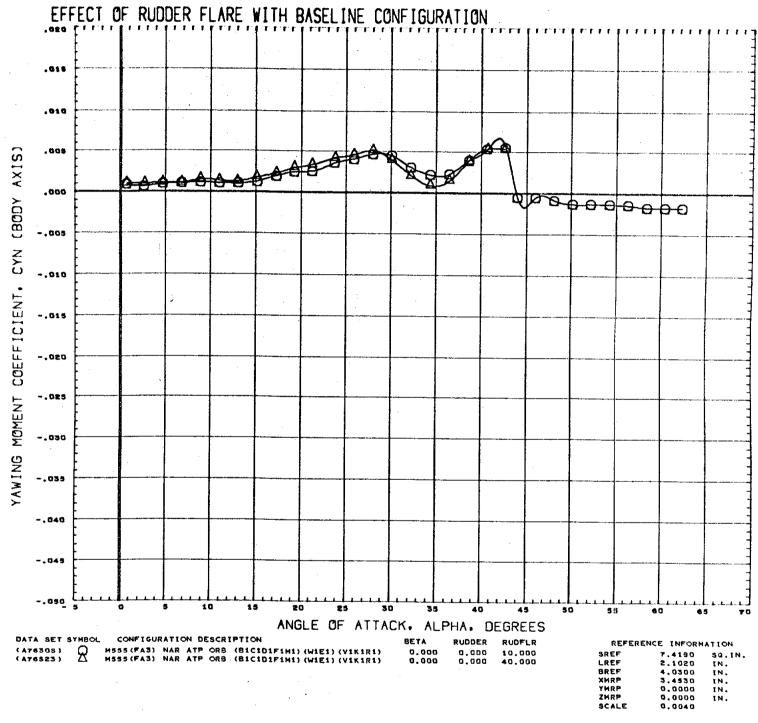




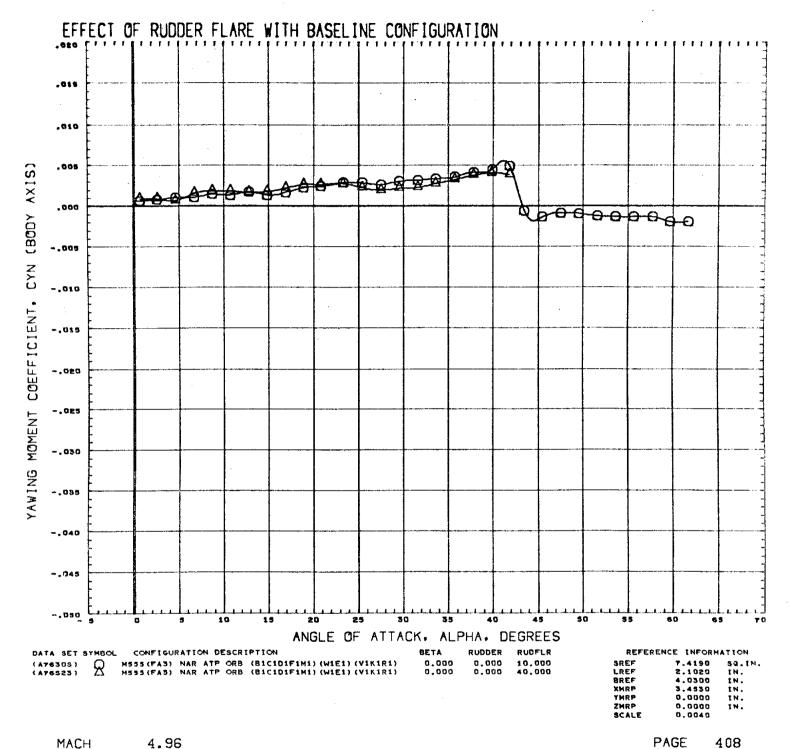
1.20

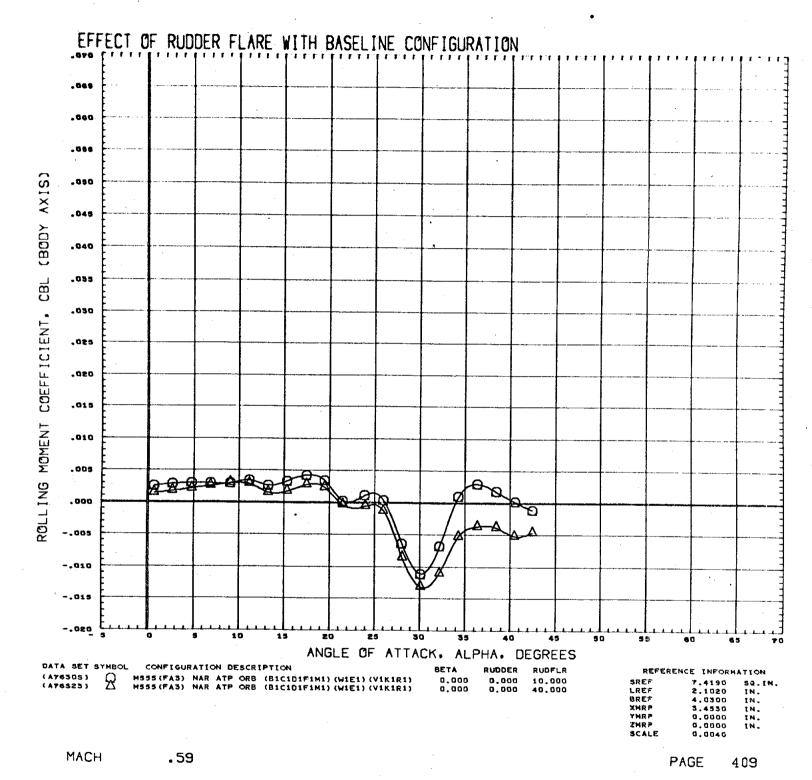


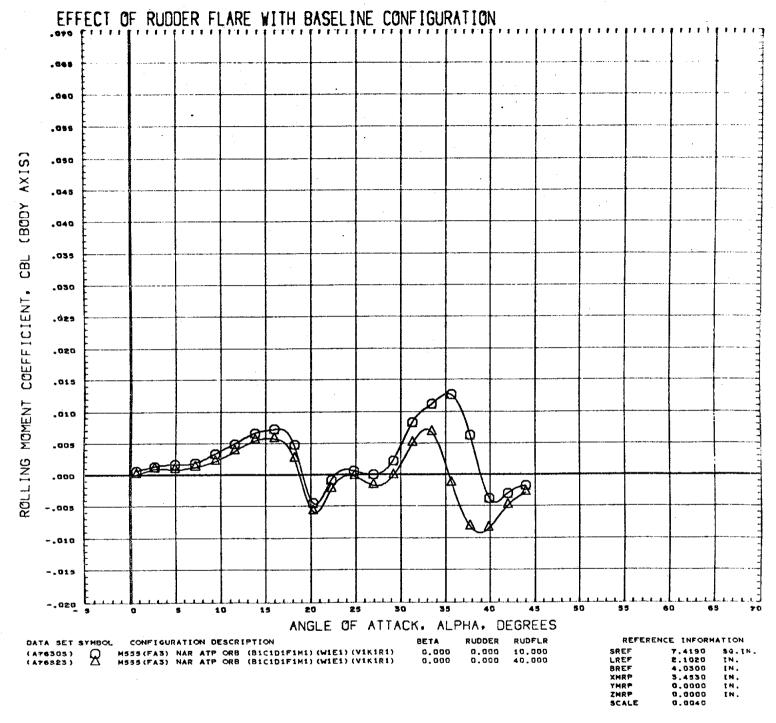
MACH 1.97



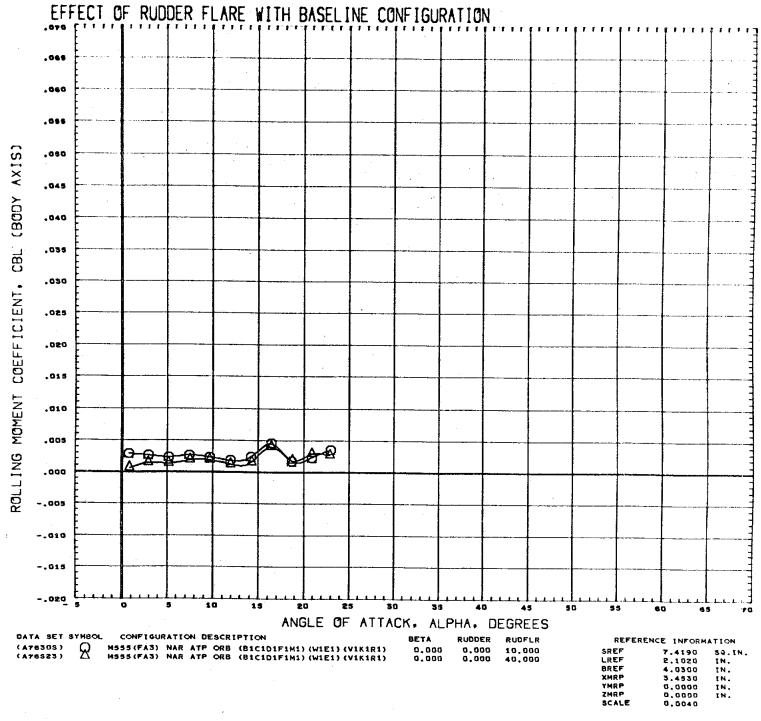
MACH 2.99



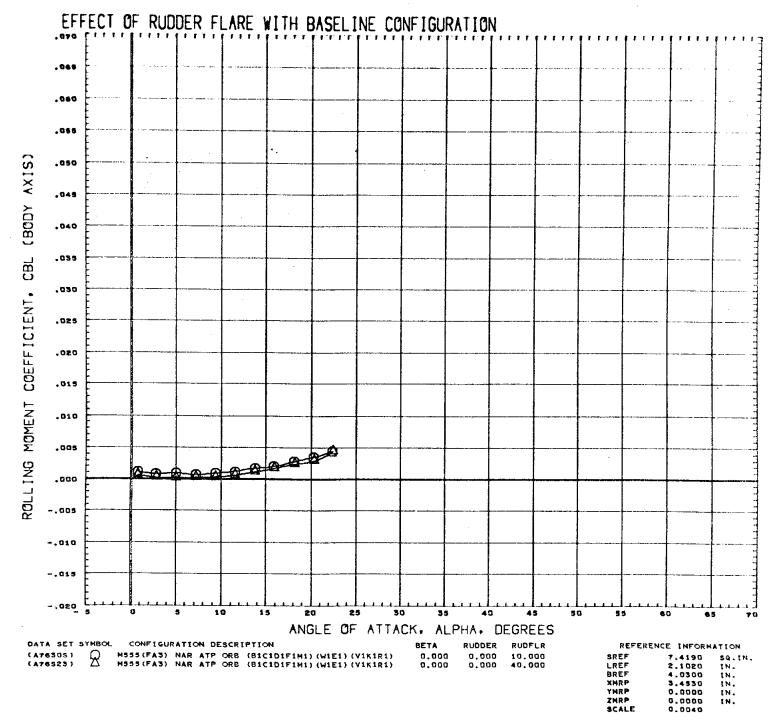




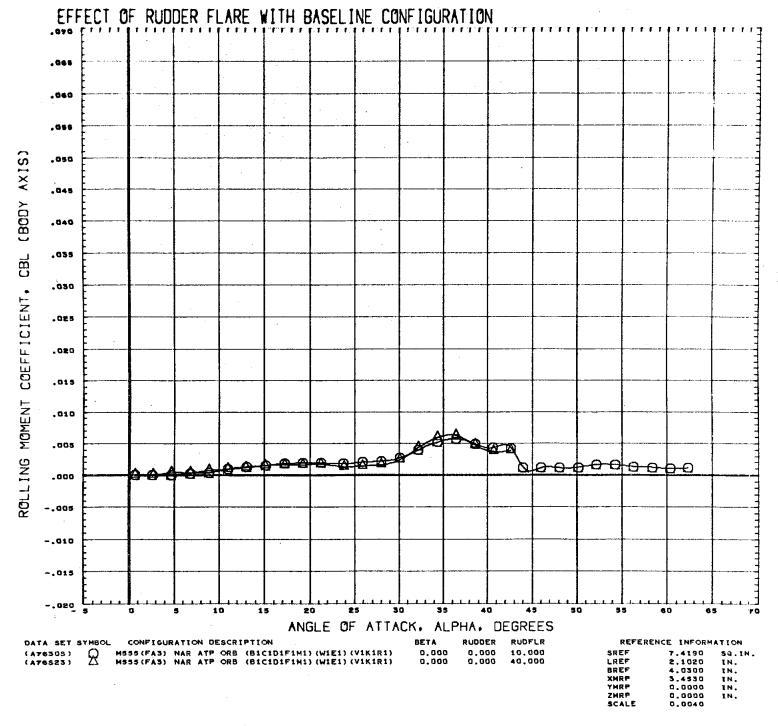
.90



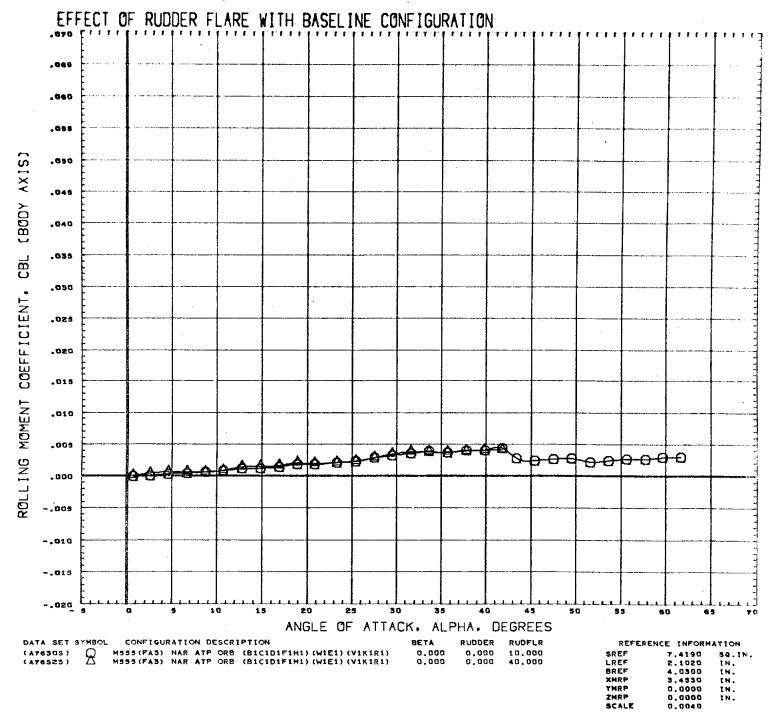
1.20



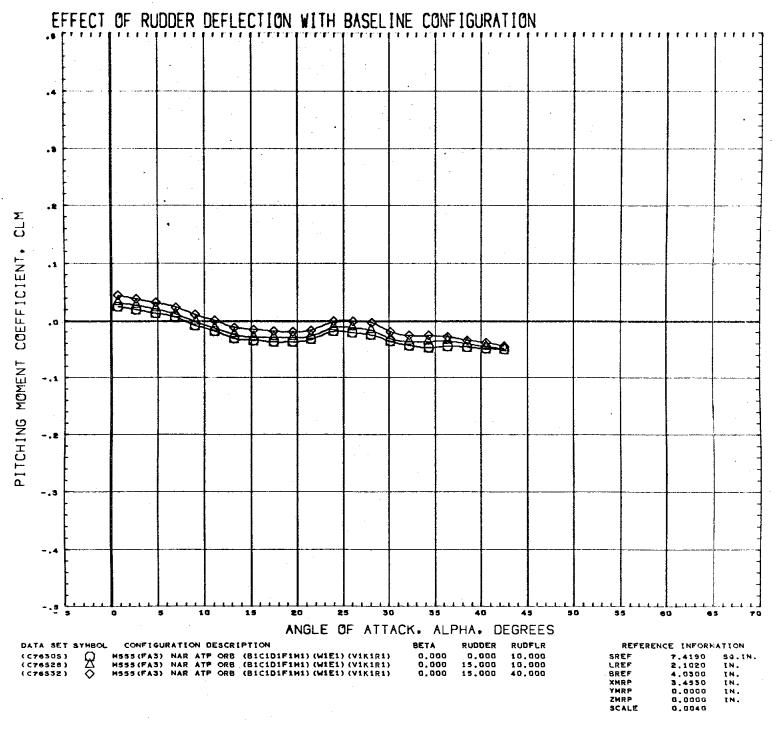
MACH 1.97



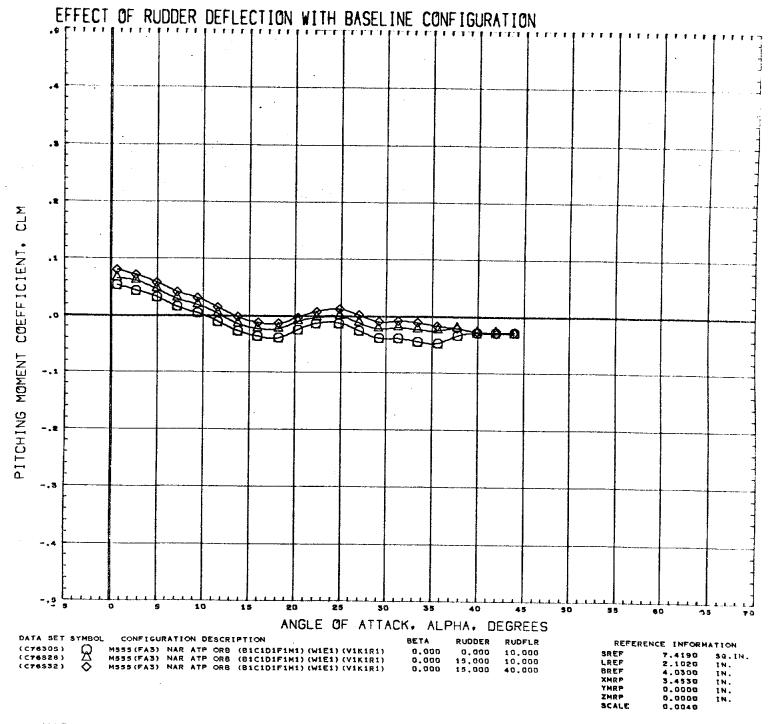
MACH 2.99



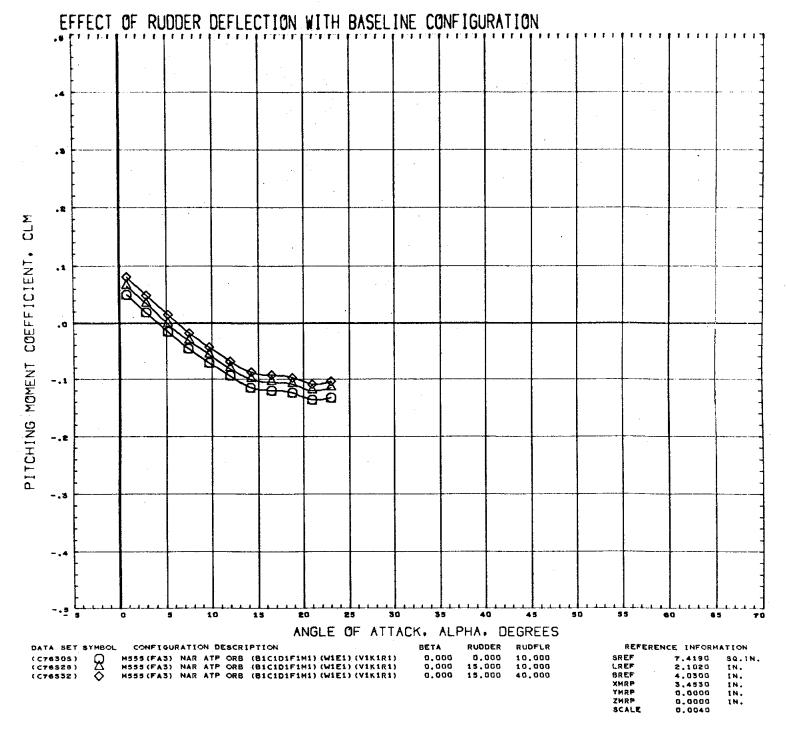
MACH 4.96



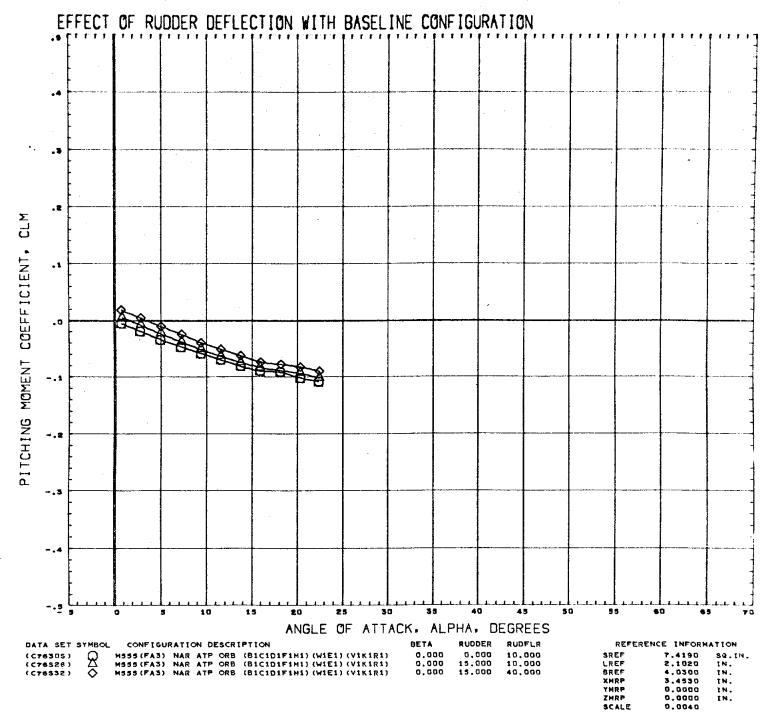
MACH .59



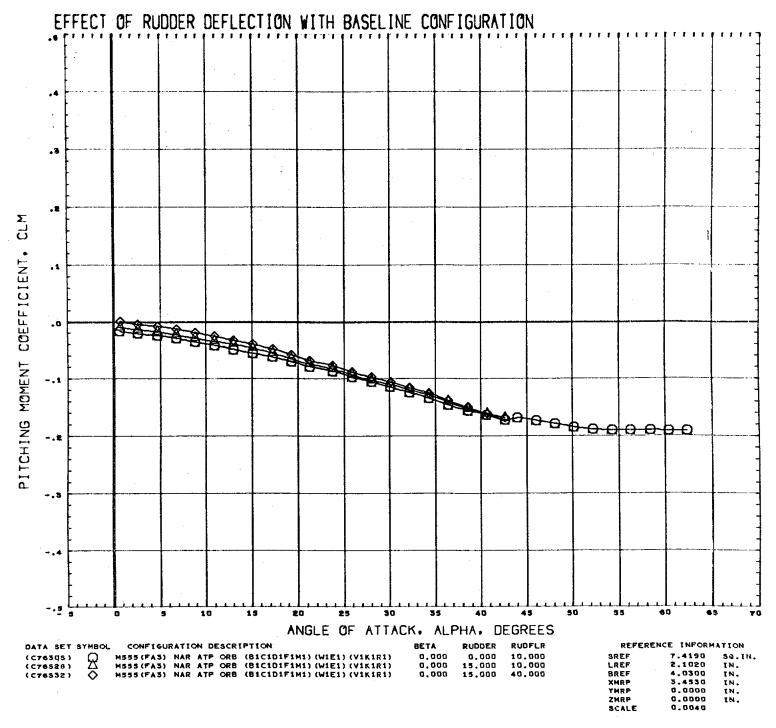
MACH .90



MACH 1.20

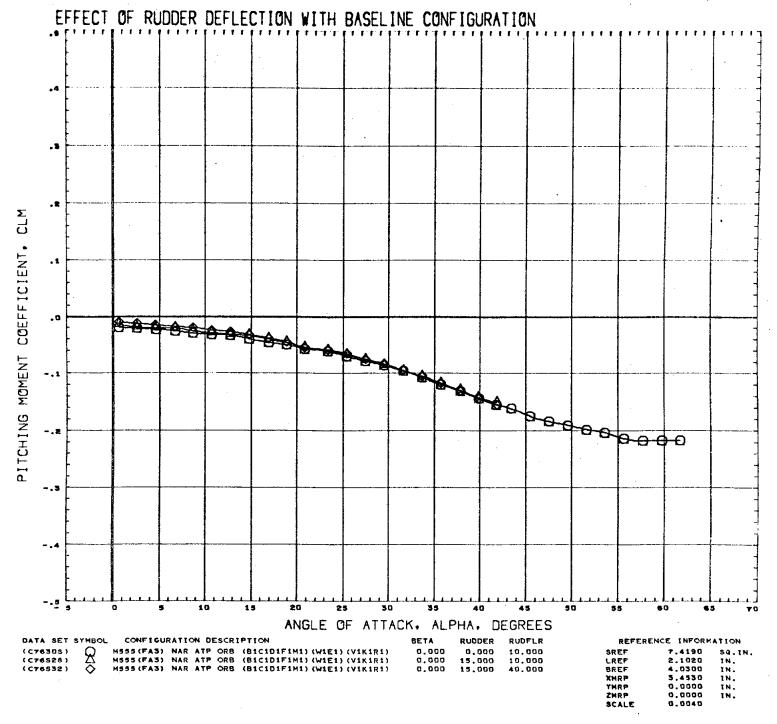


1.97

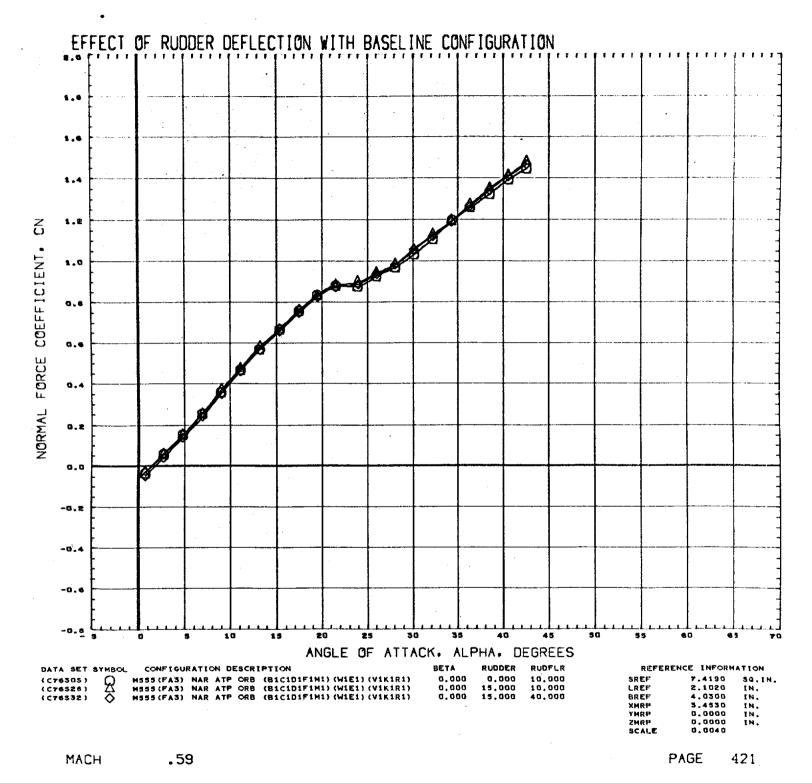


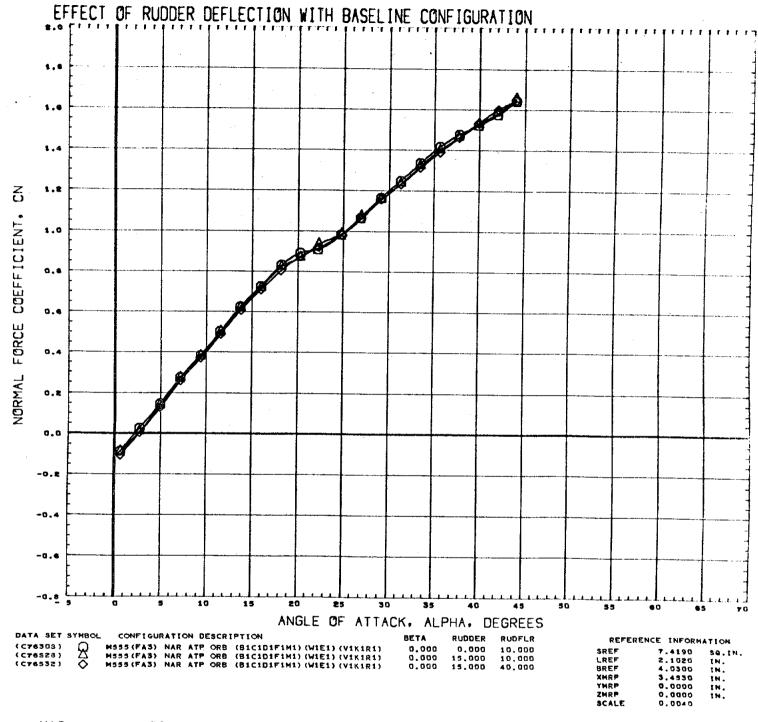
PAGE 419

MACH

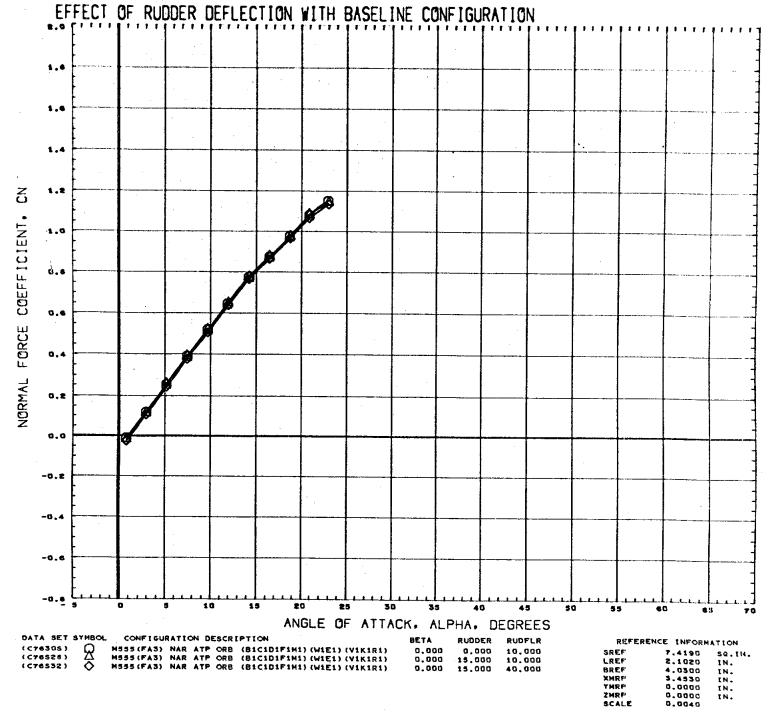


4.96





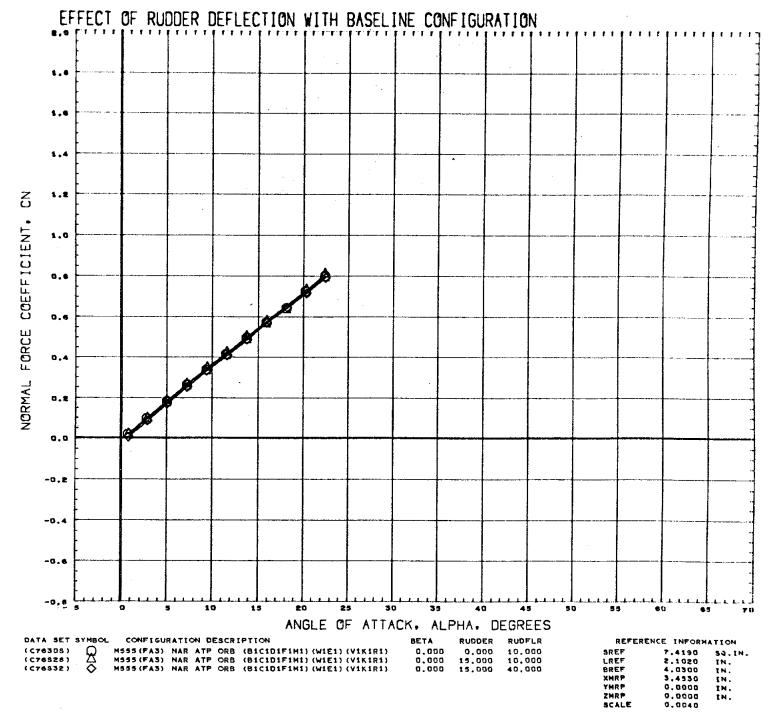
MACH .90



1.20

PAGE

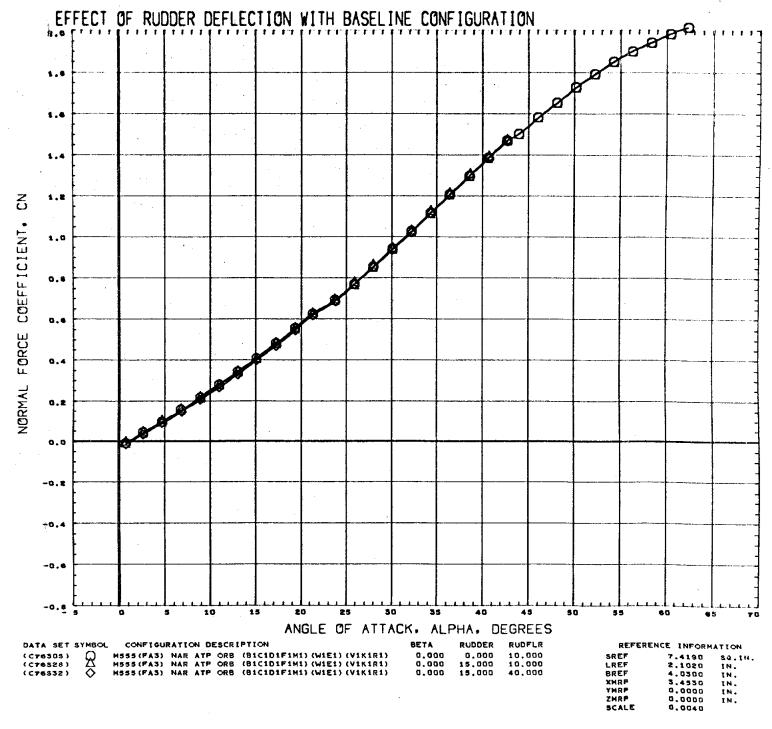
423



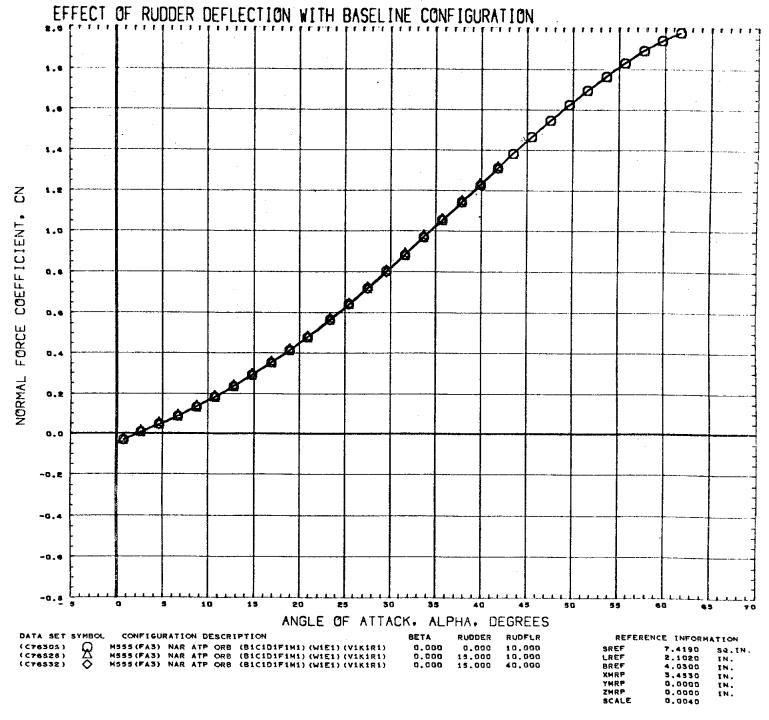
1.97

PAGE

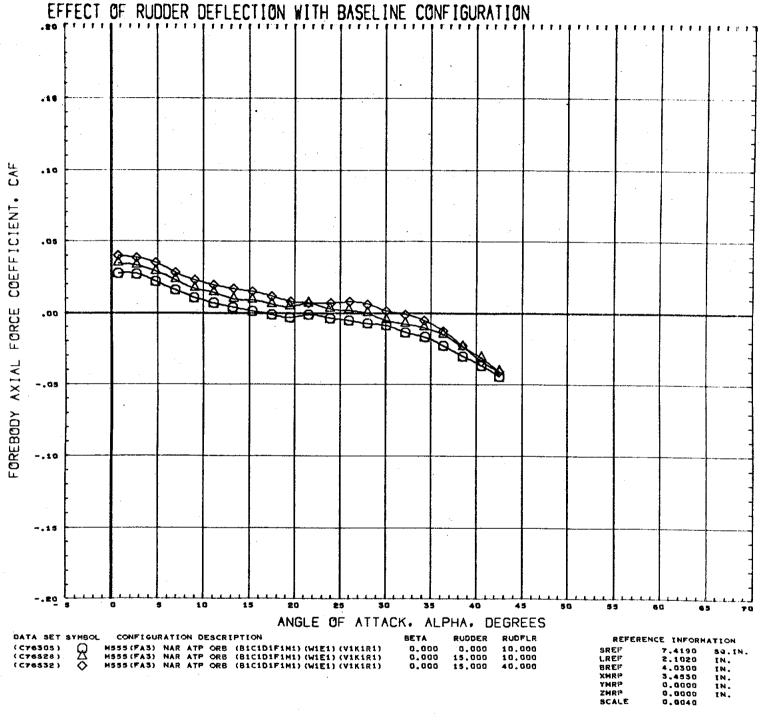
424



MACH 2.99



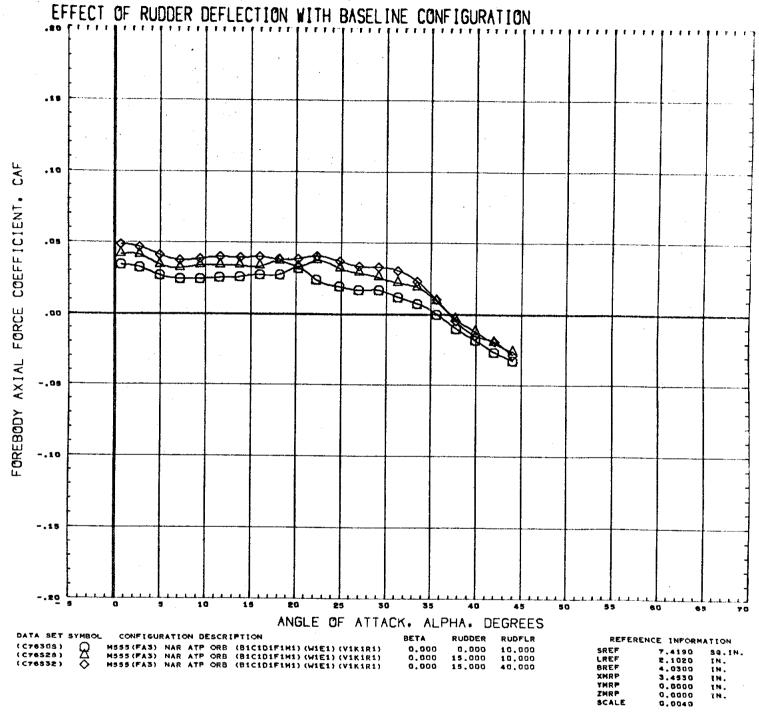
MACH 4.96



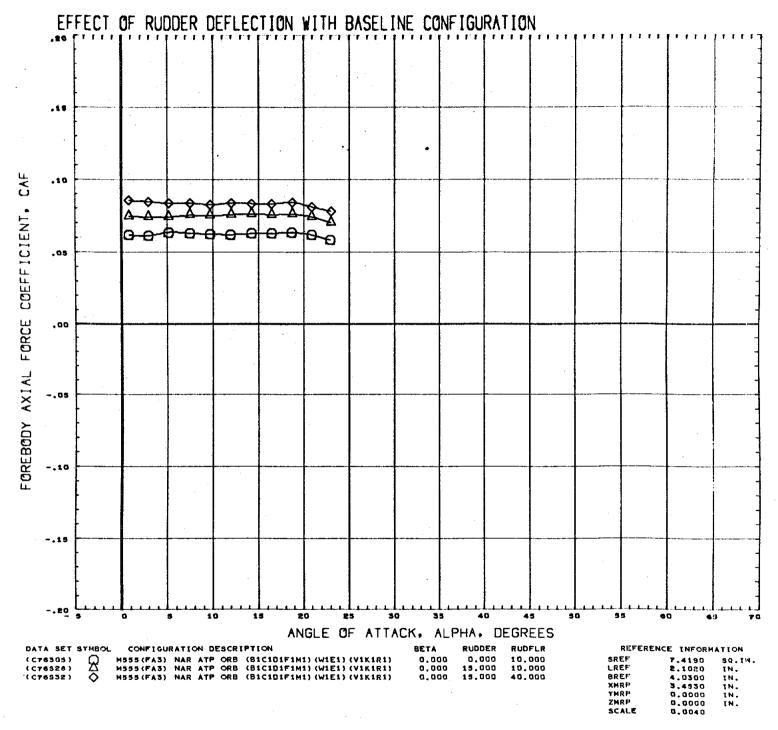
.59

PAGE

427



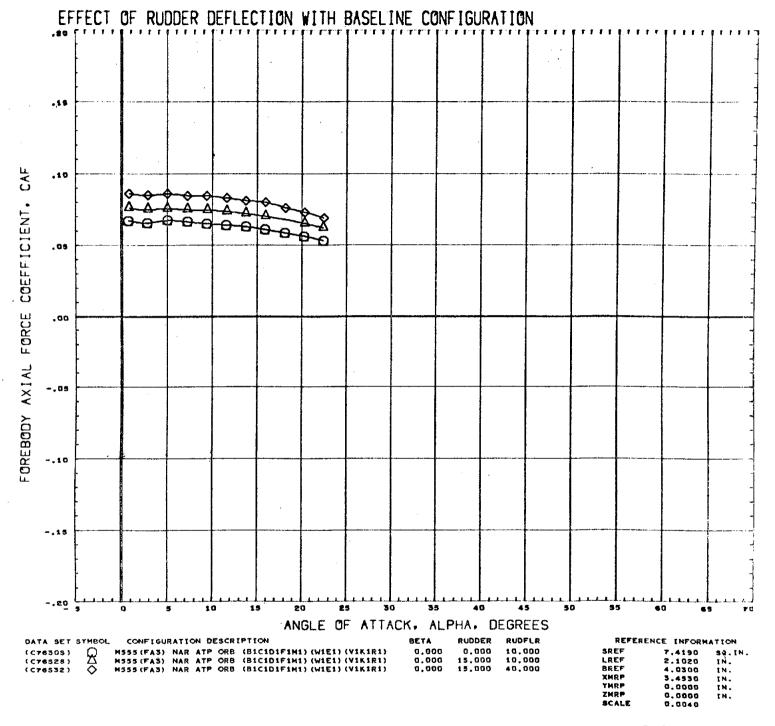
MACH .90



1.20

: PAGE

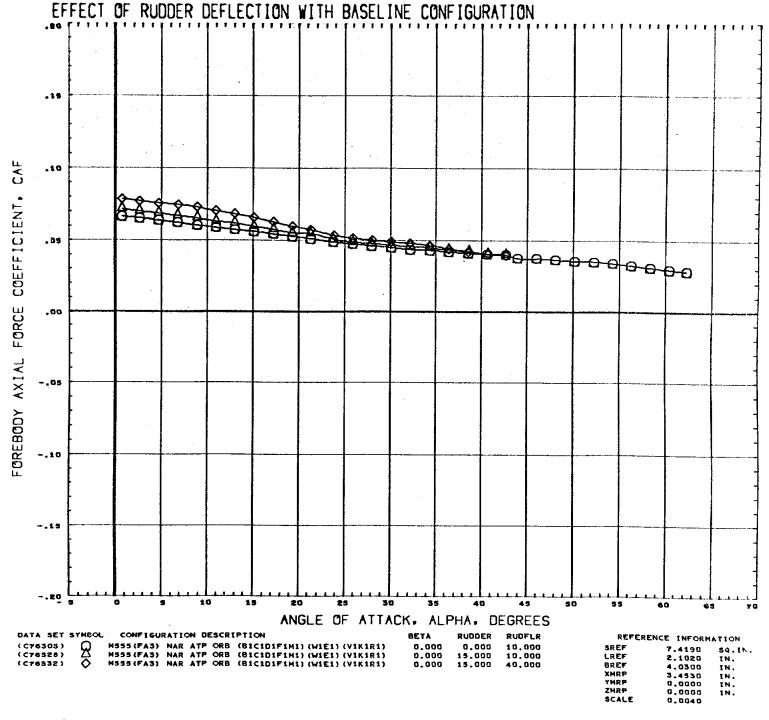
429



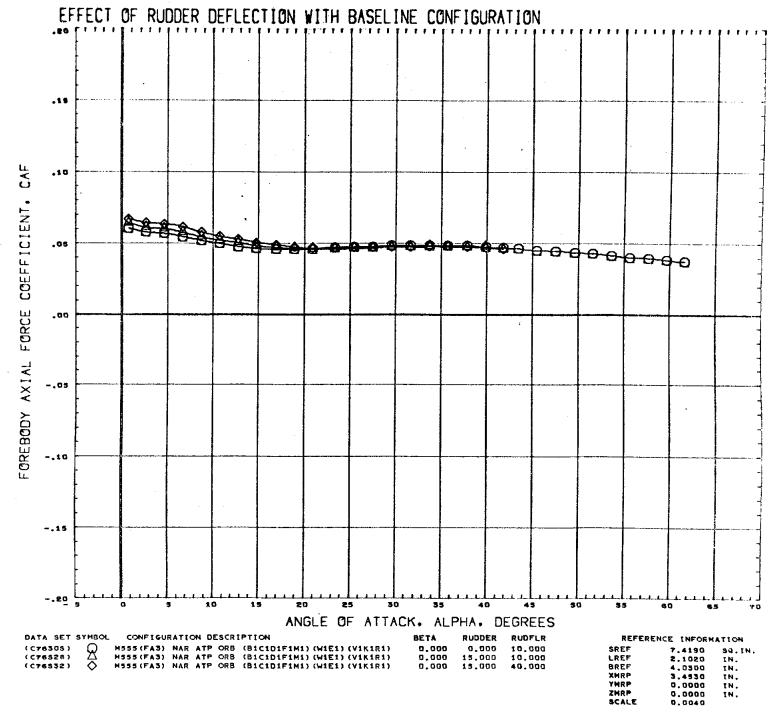
1.97

PAGE

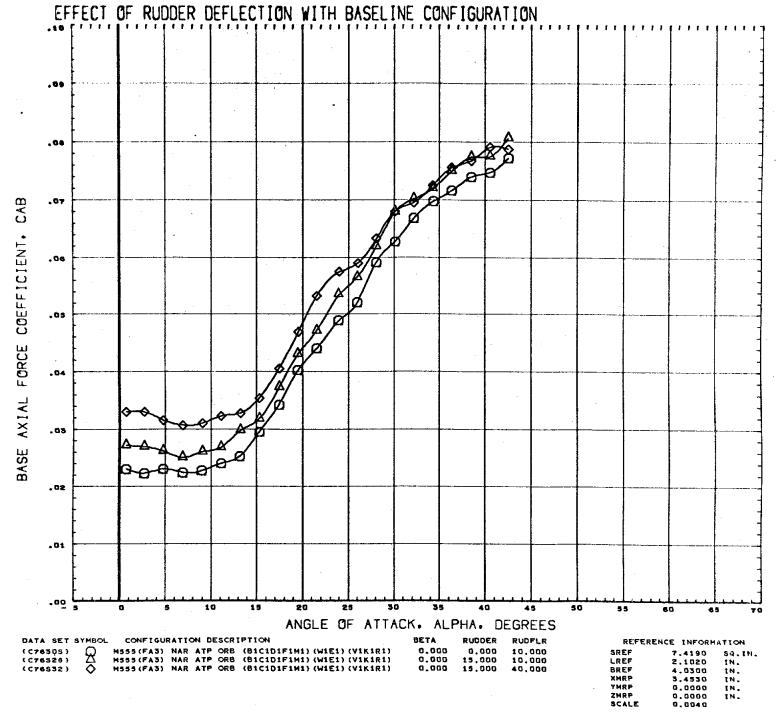
430



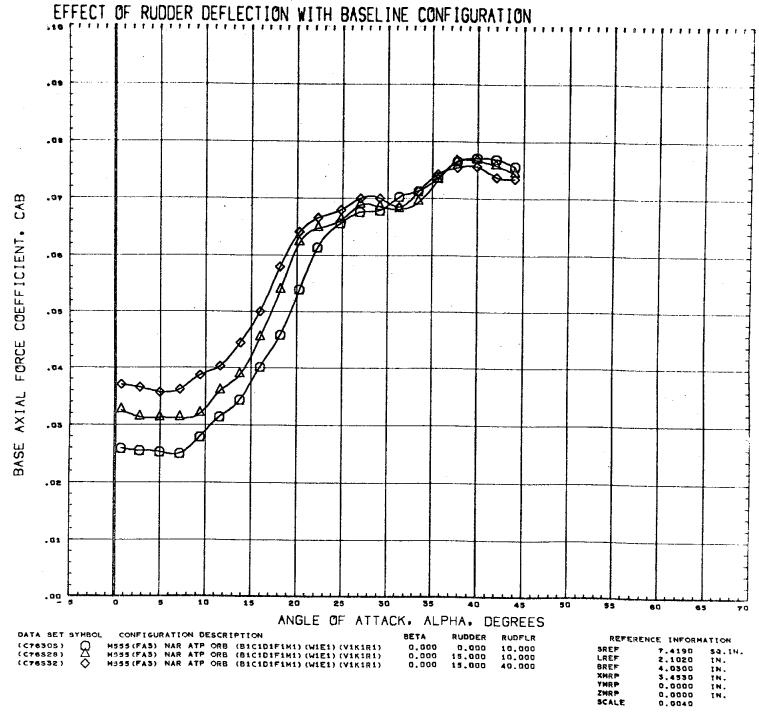
MACH 2.99



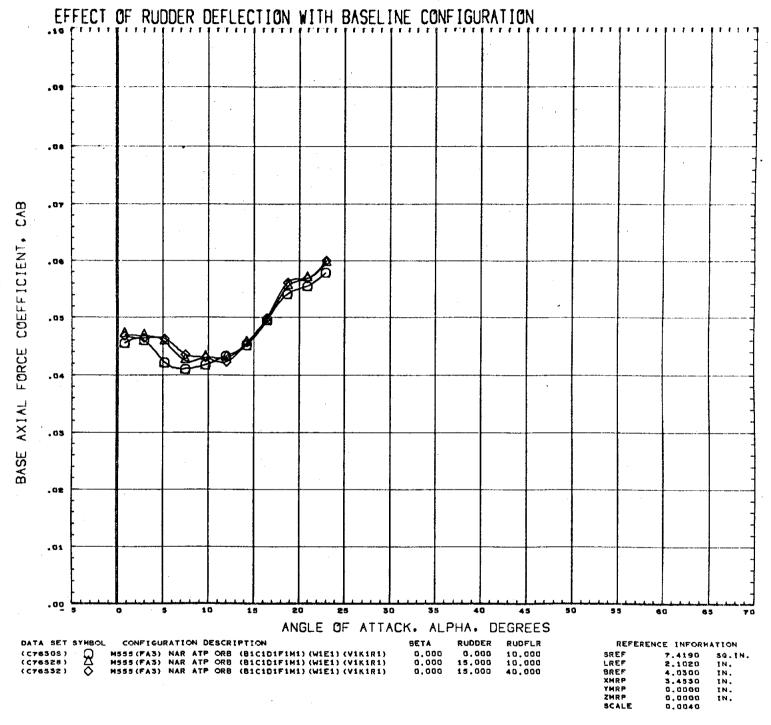
MACH 4.96



.59

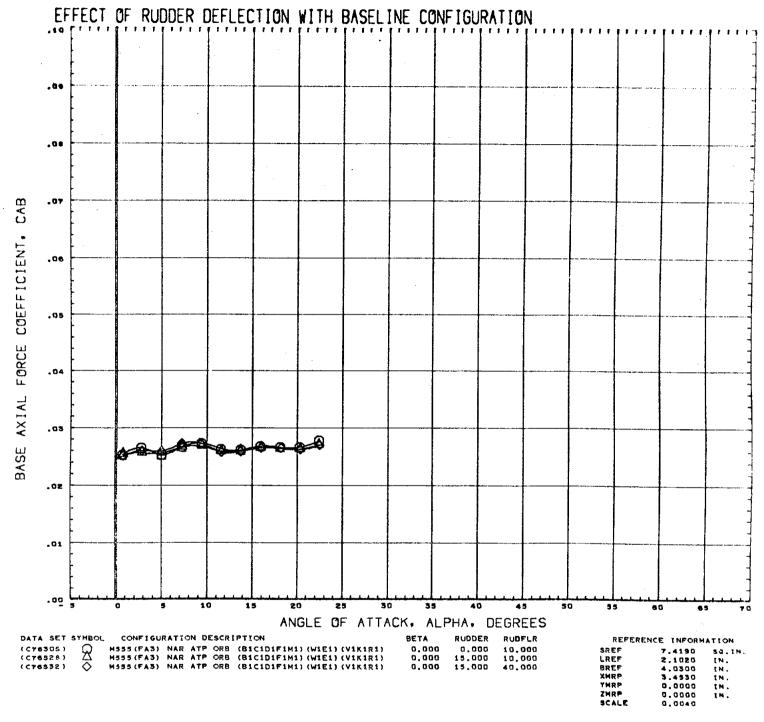


MACH .90

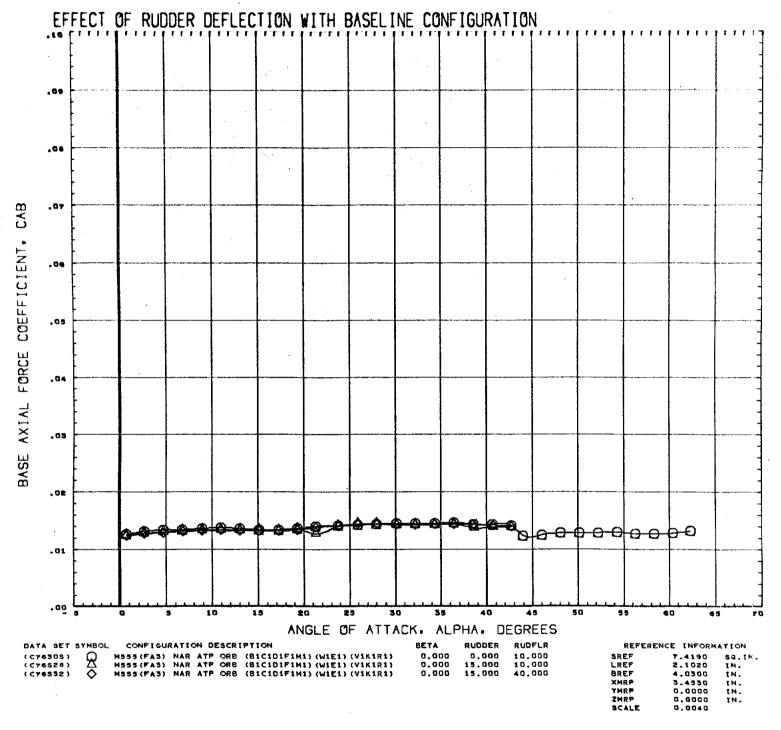


1.20

PAGE

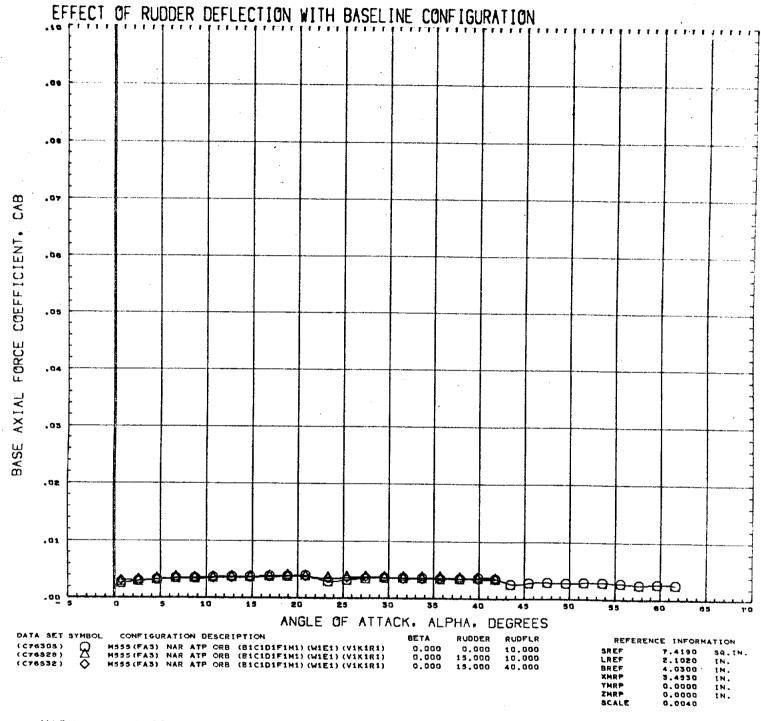


MACH 1.97

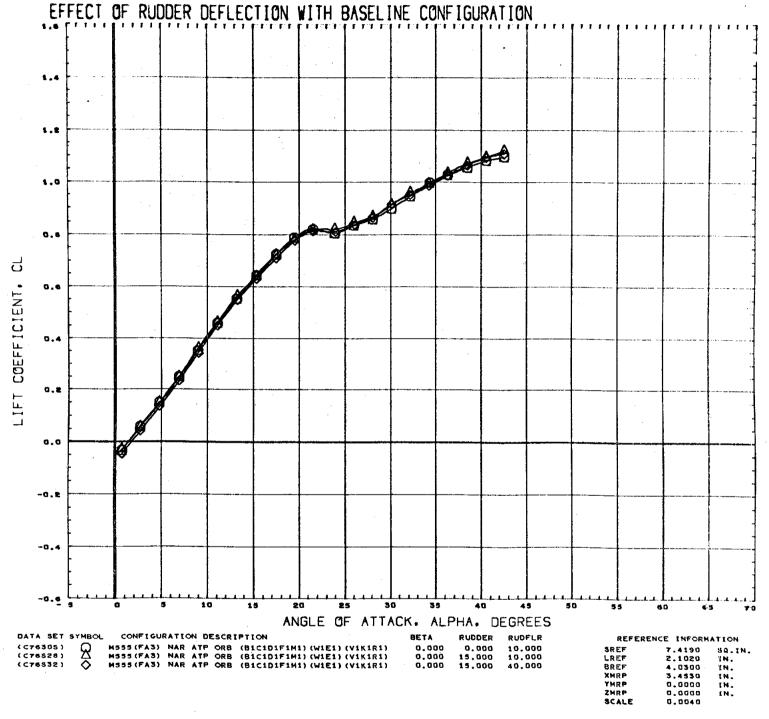


2.99

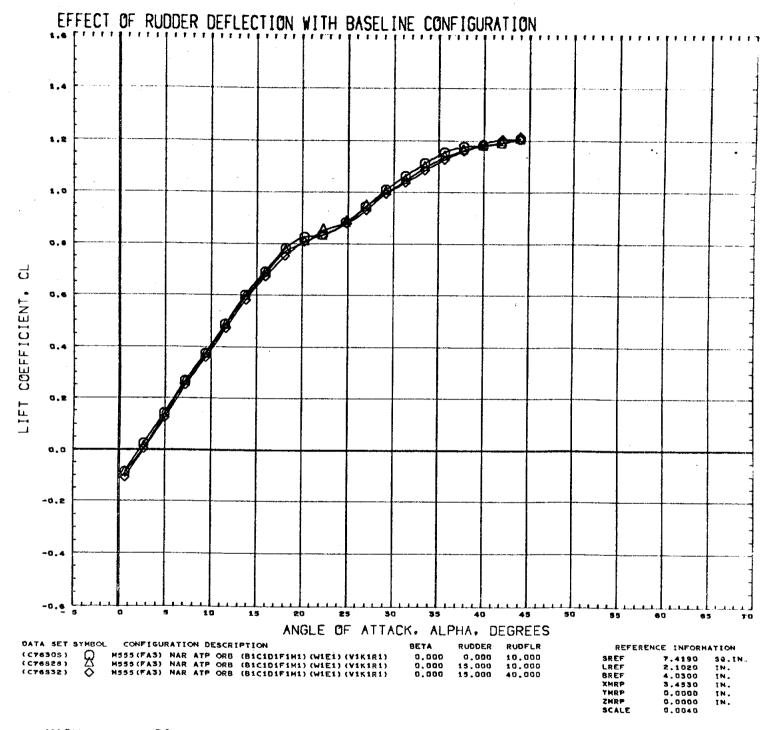
PAGE



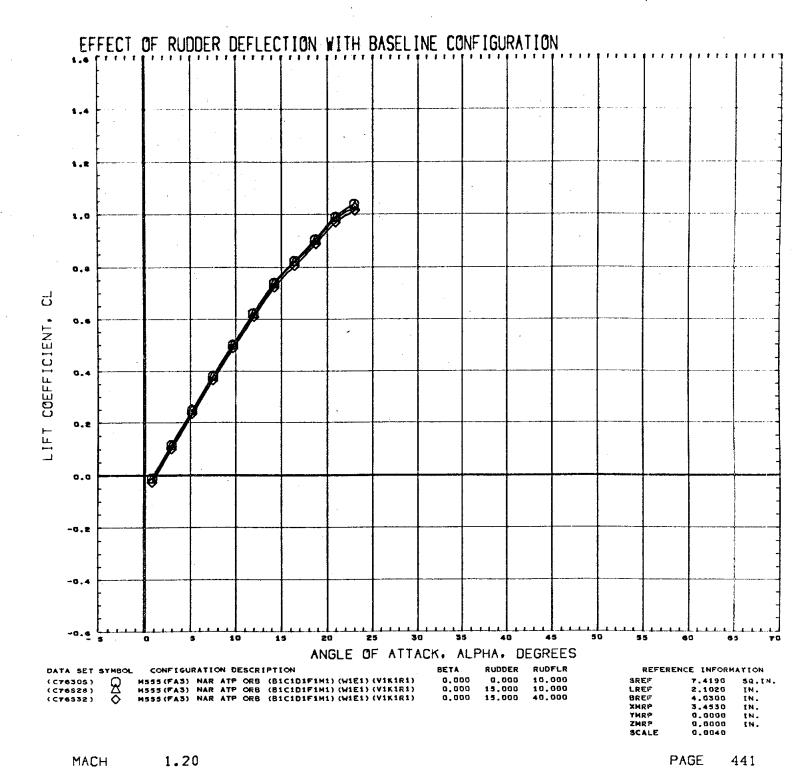
4.96

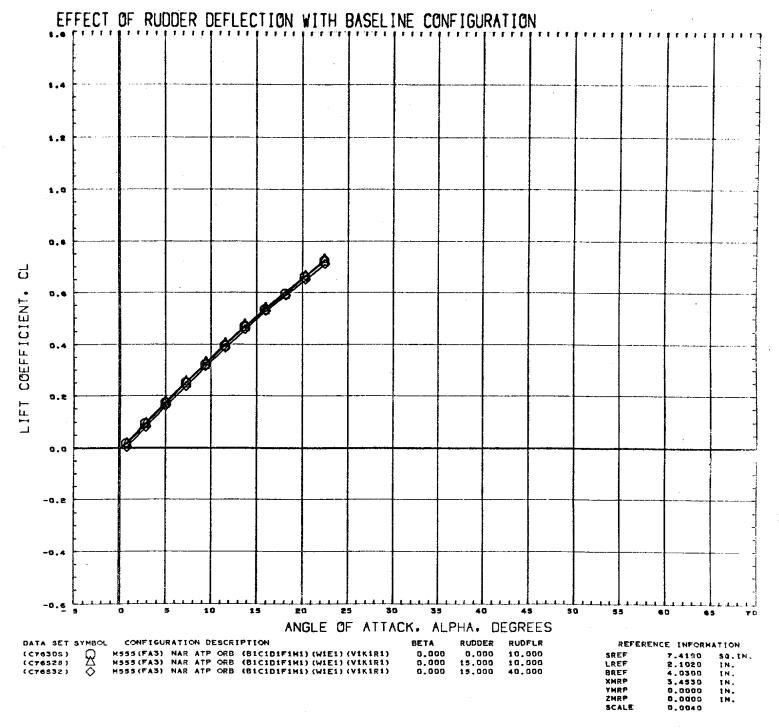


.59

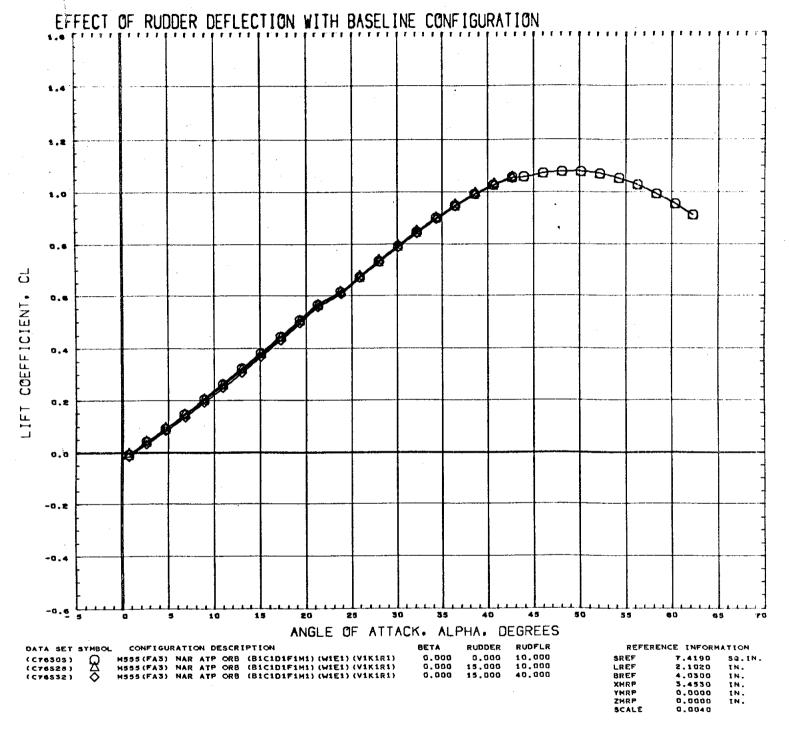


MACH .90

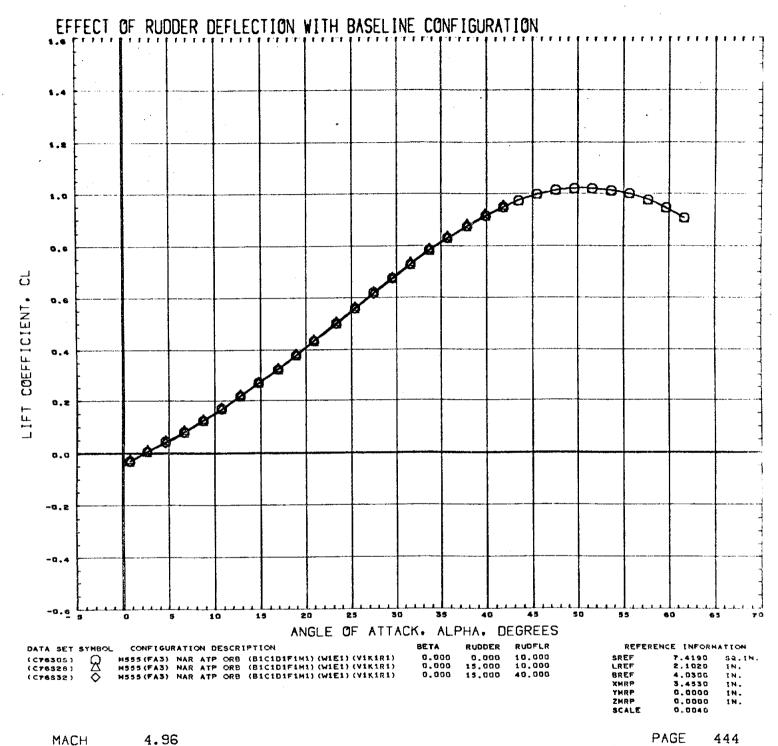


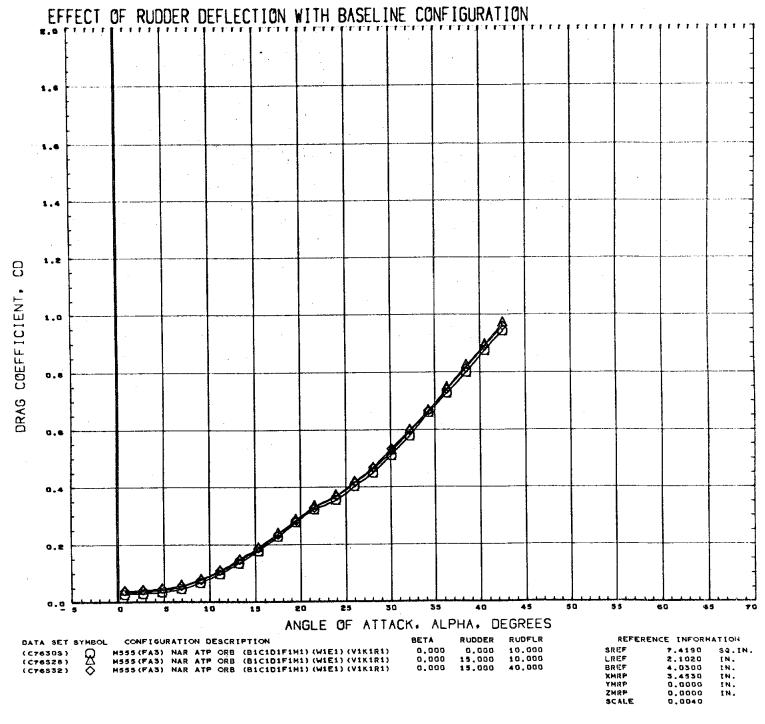


MACH 1.97

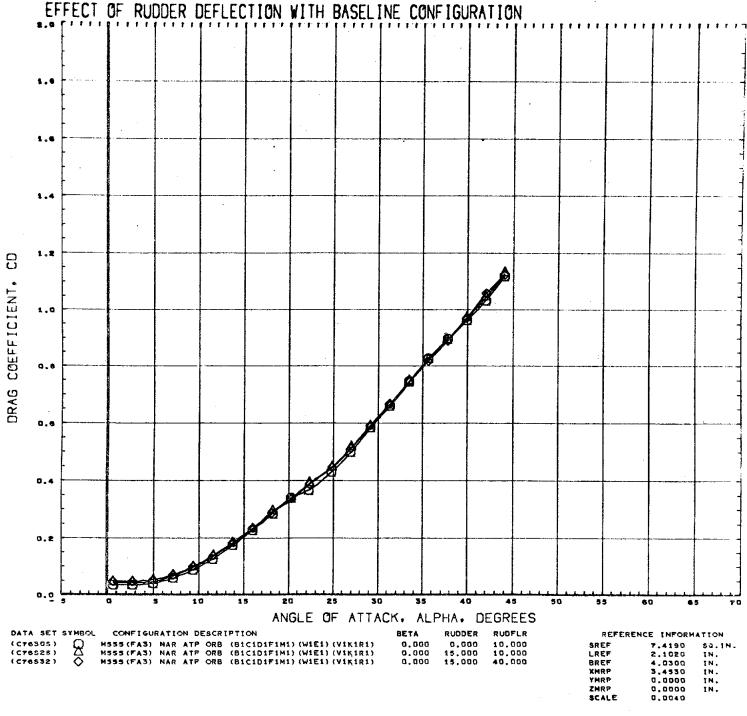


MACH 2.99

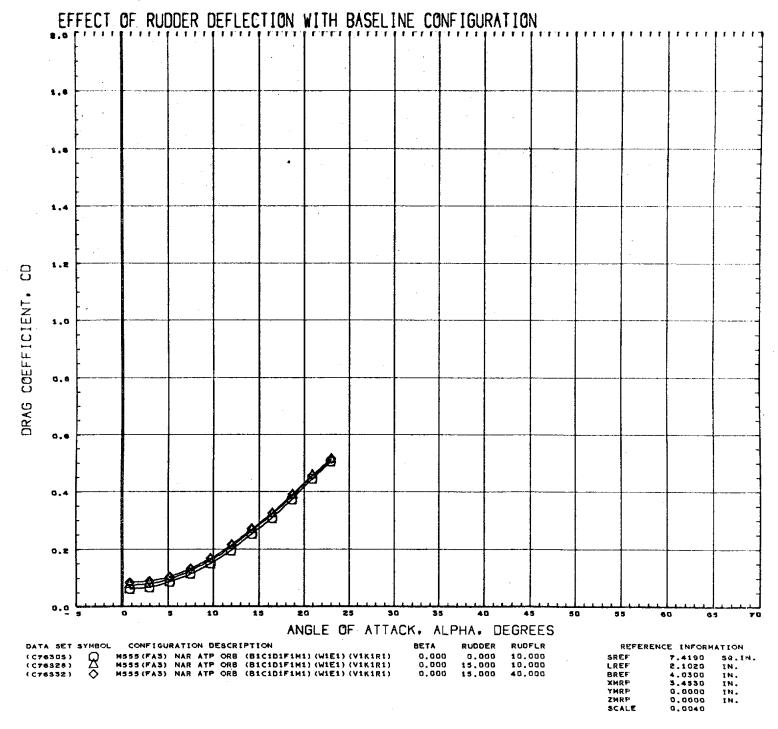




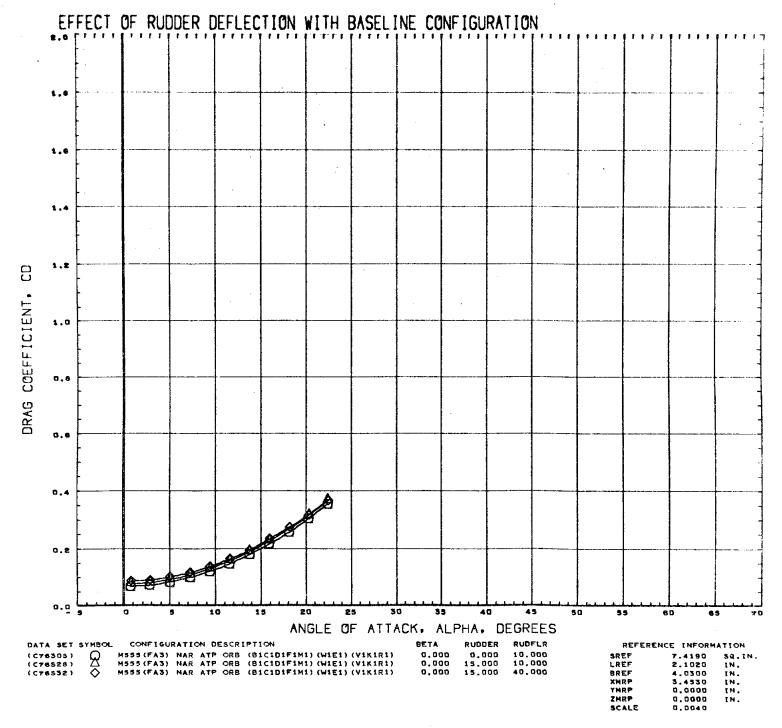
.59



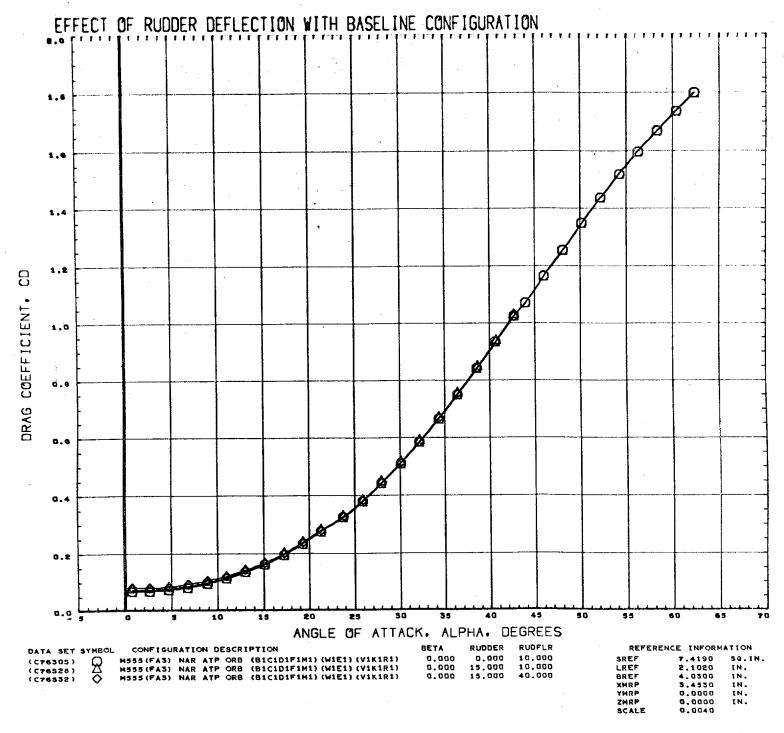
.90



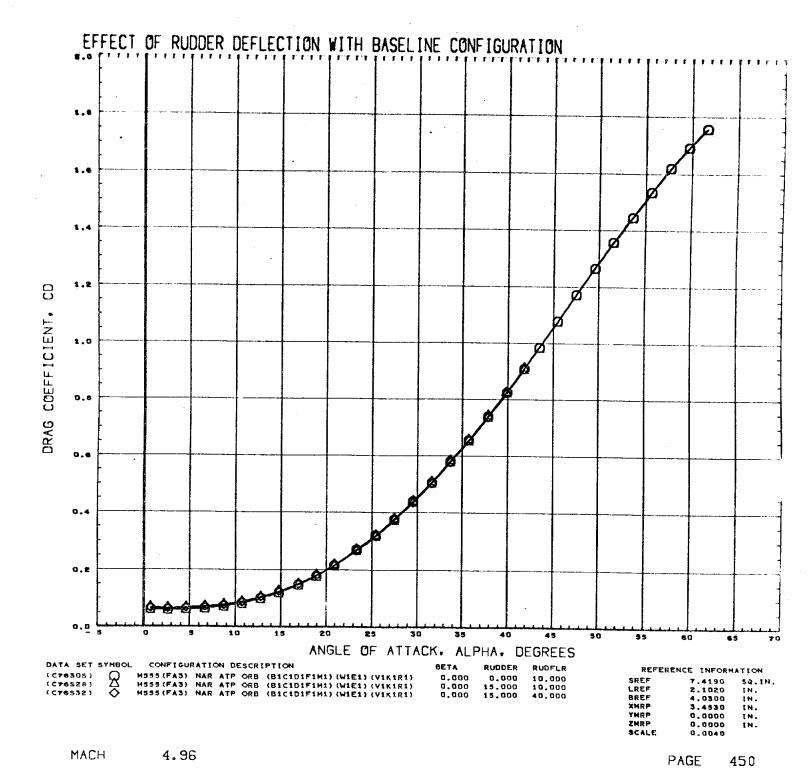
MACH 1.20

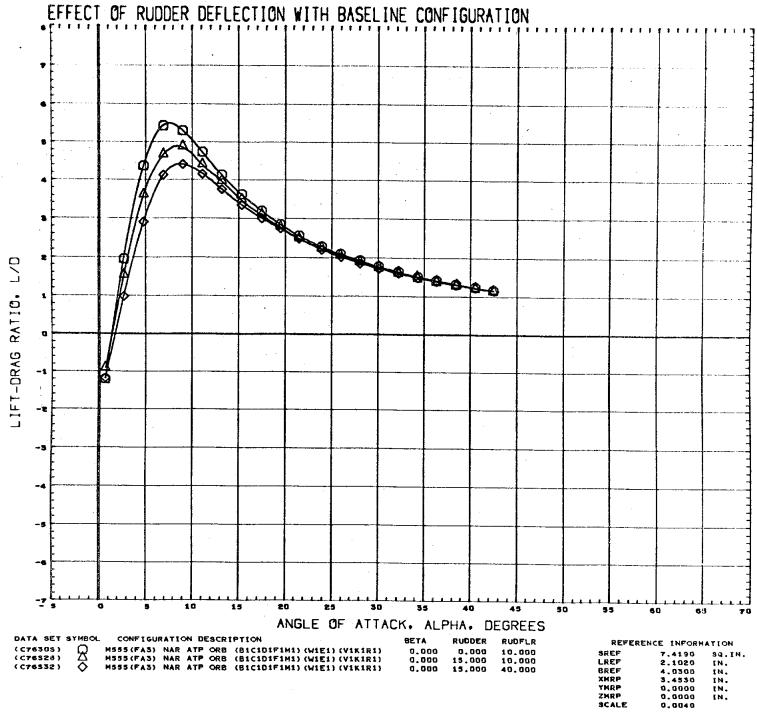


MACH 1.97



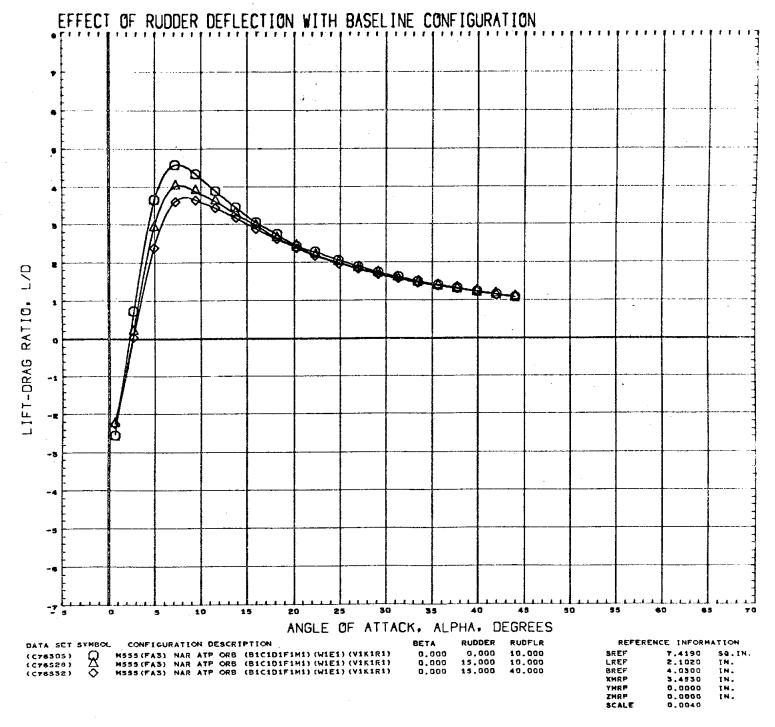
2.99



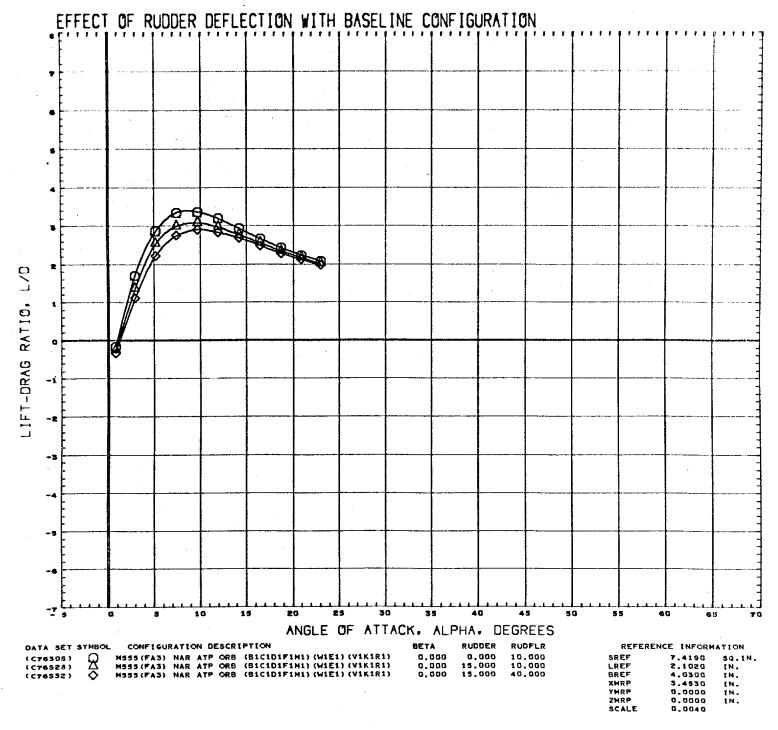


.59

PAGE

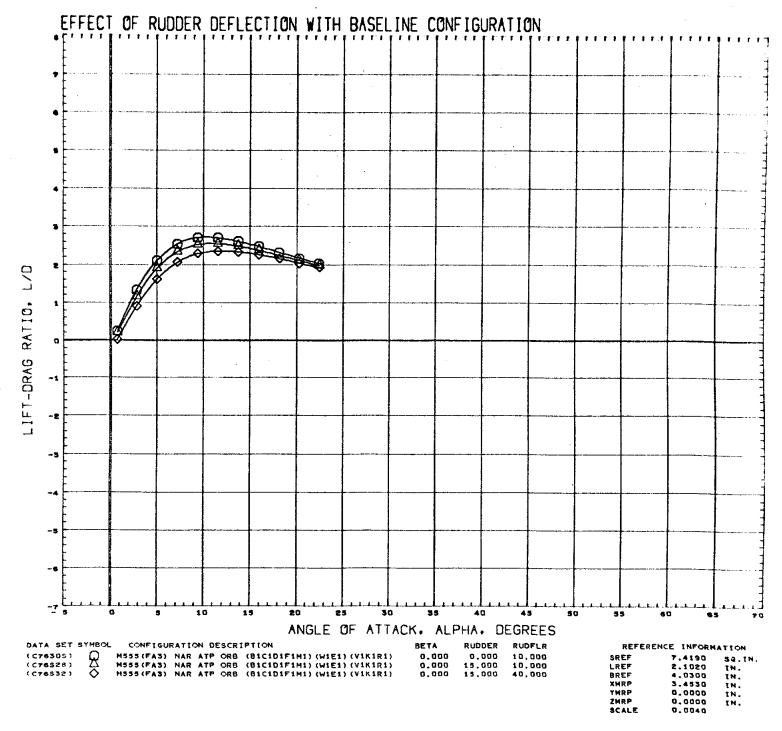


.90

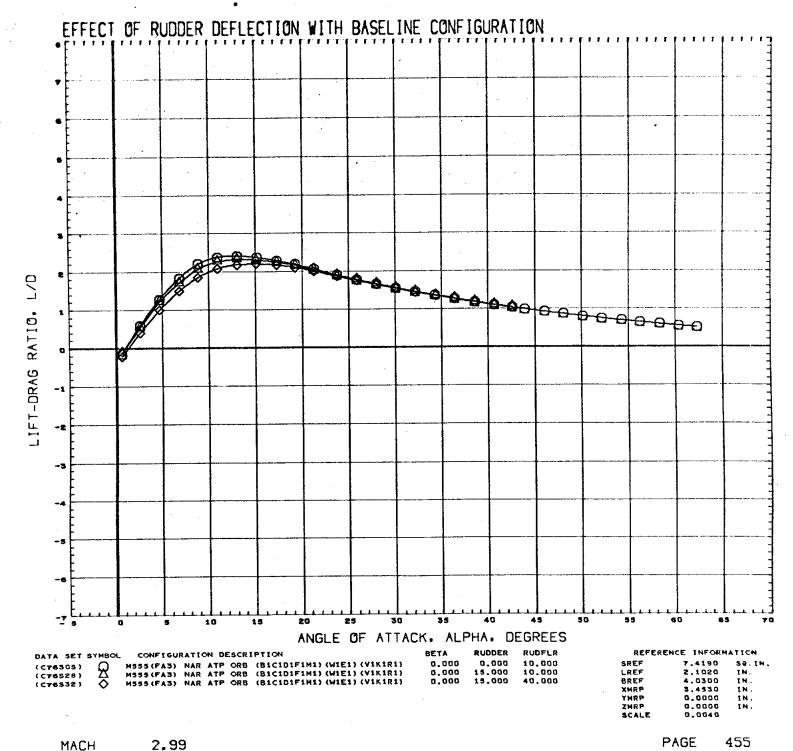


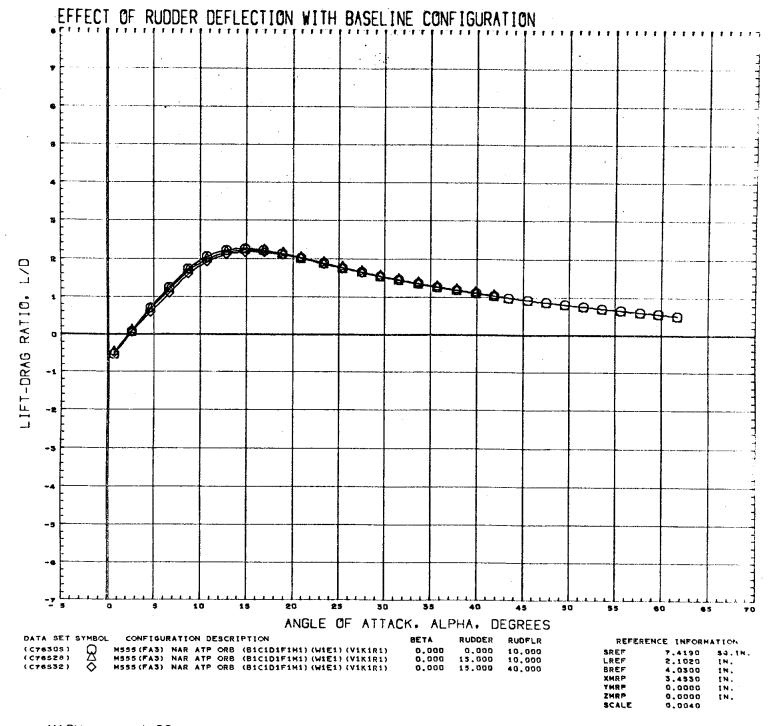
1.20

PAGE

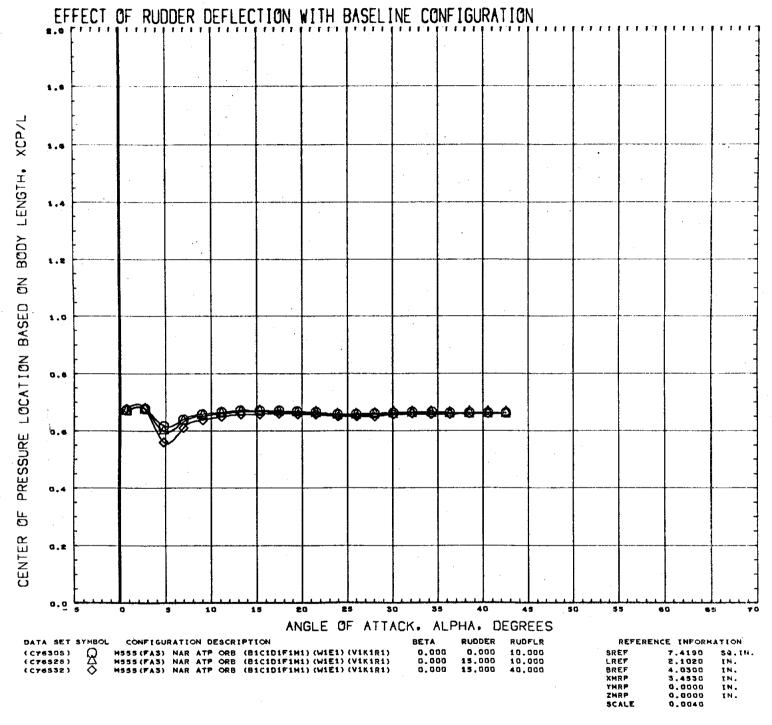


MACH 1.97



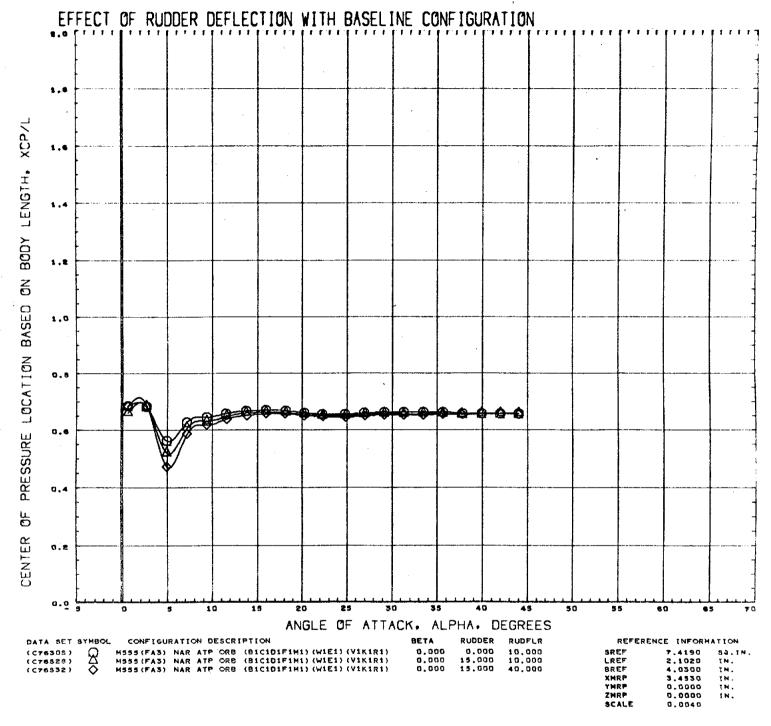


MACH 4.96

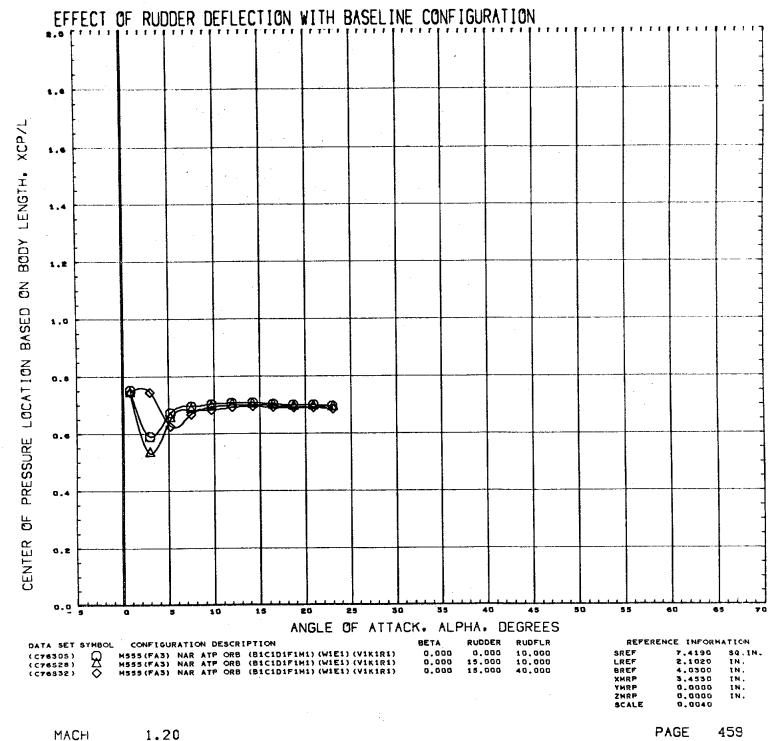


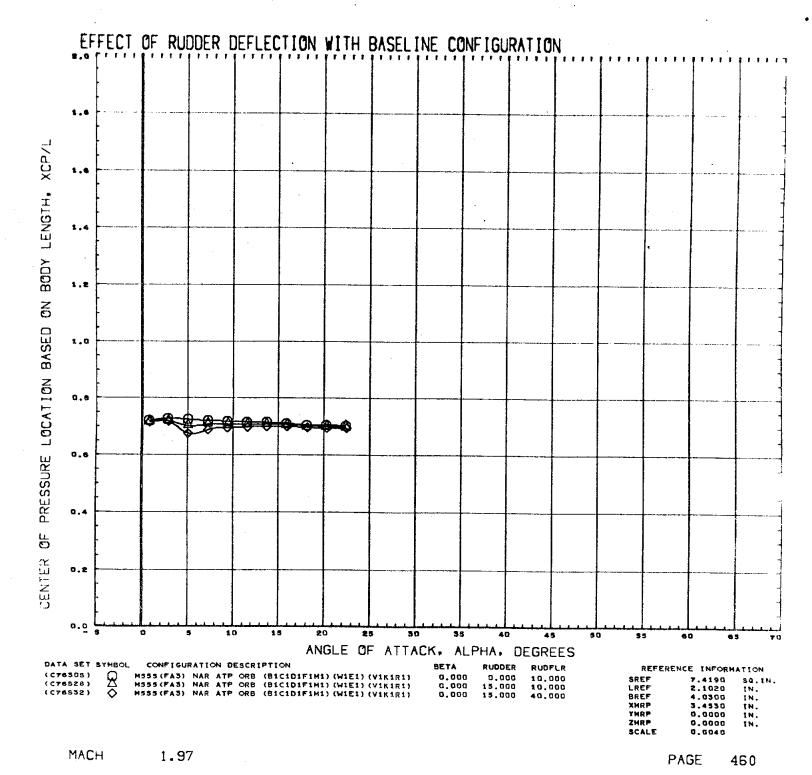
.59

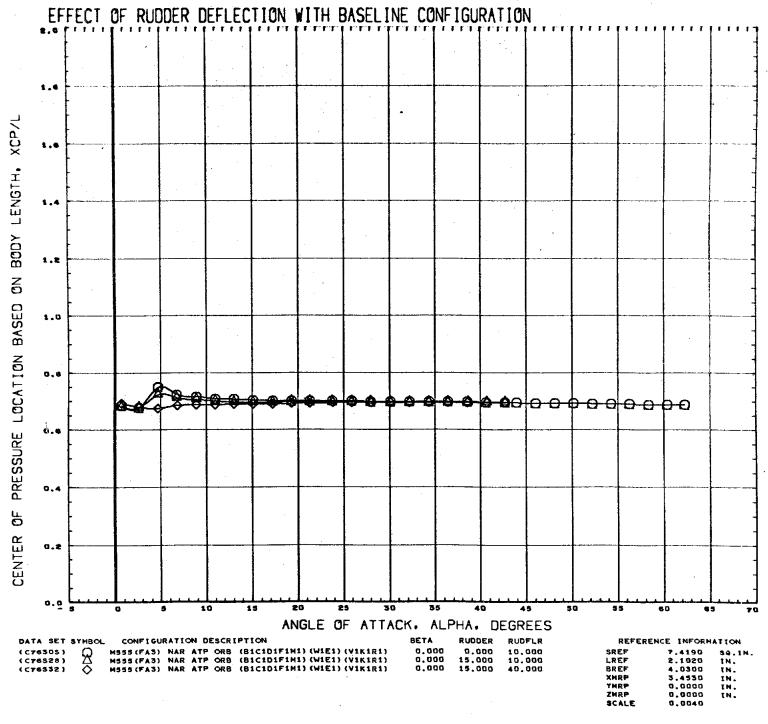
PAGE



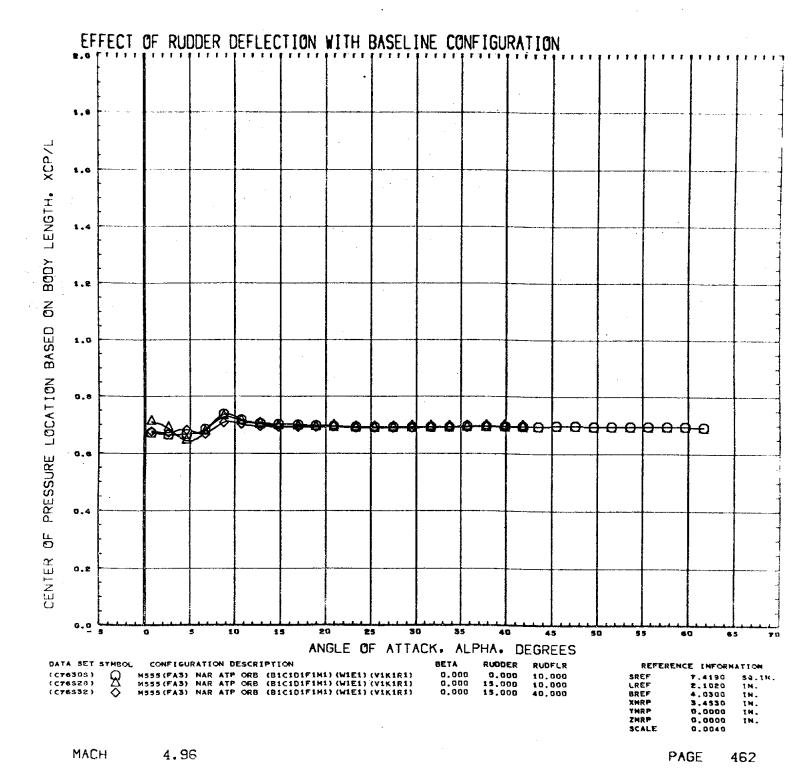
.90

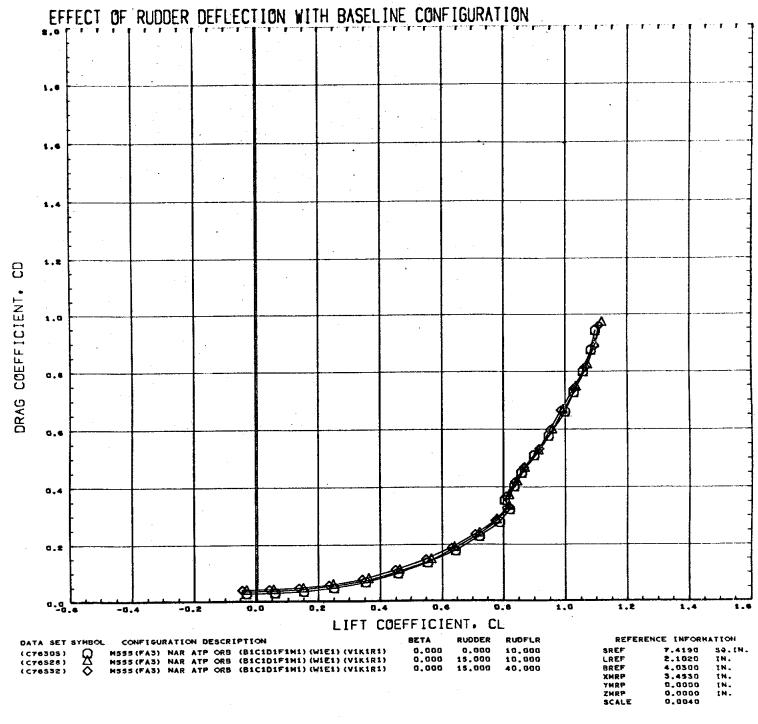






MACH 2.99

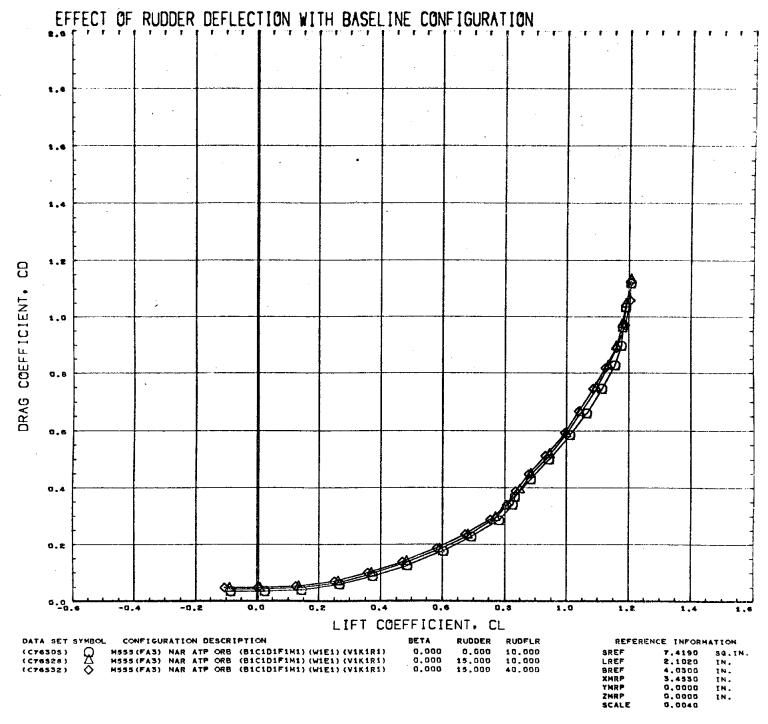




PAGE 463

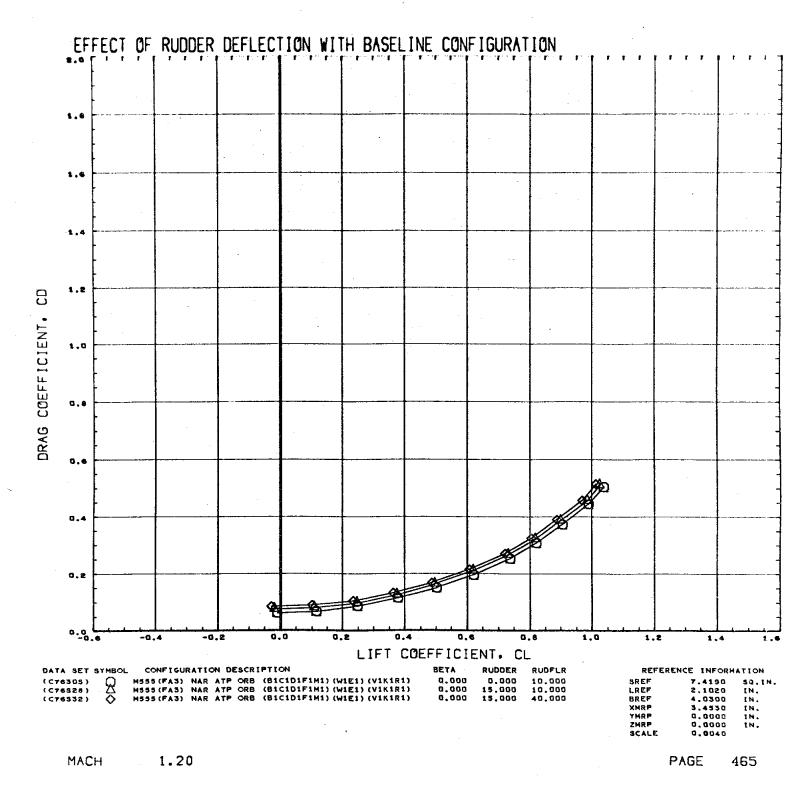
MACH

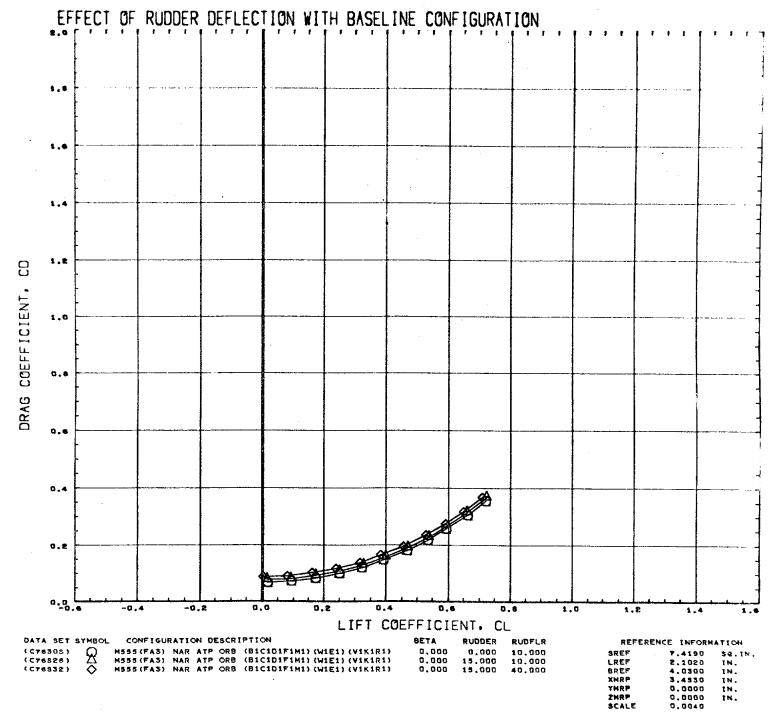
.59



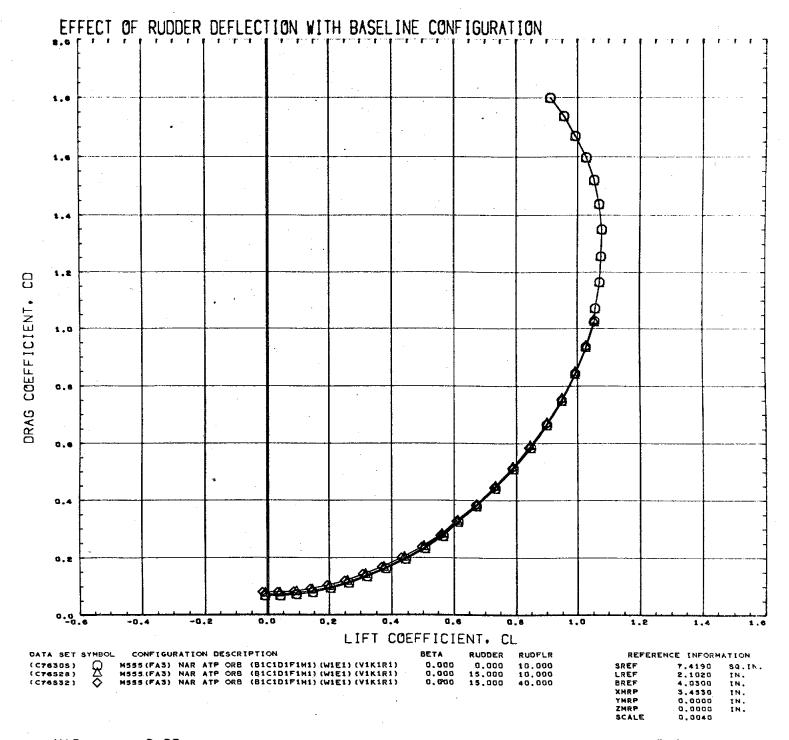
.90

PAGE



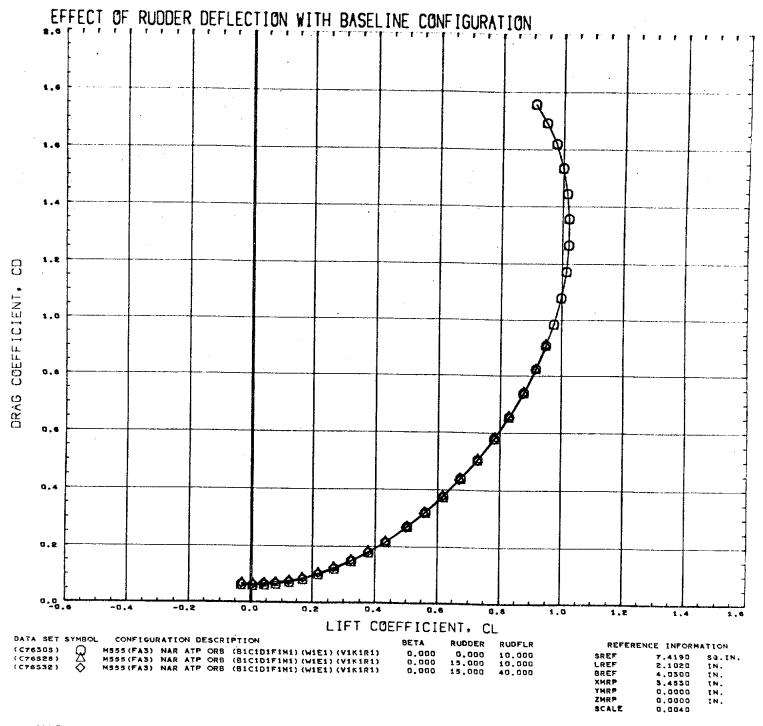


MACH 1.97

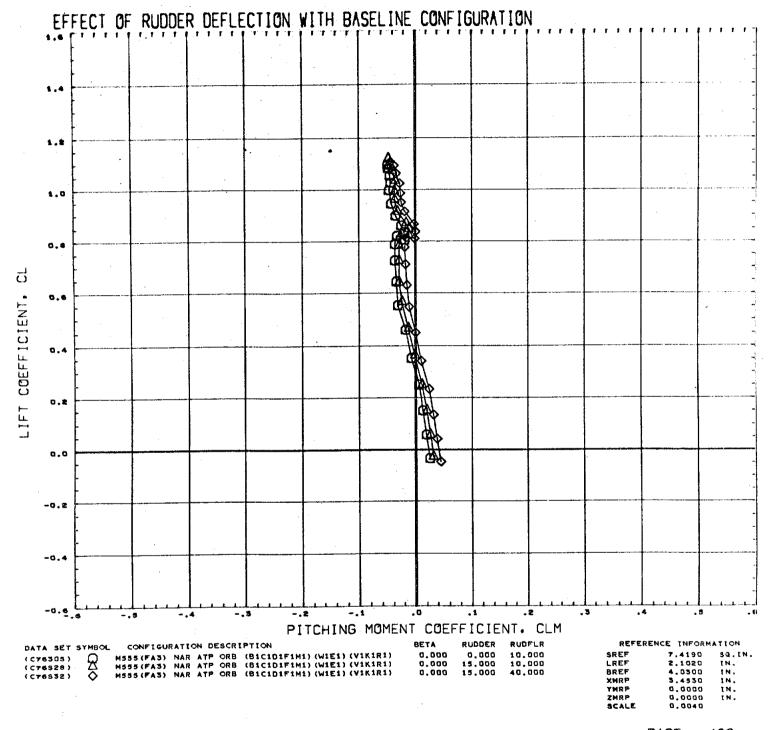


2.99

PAGE



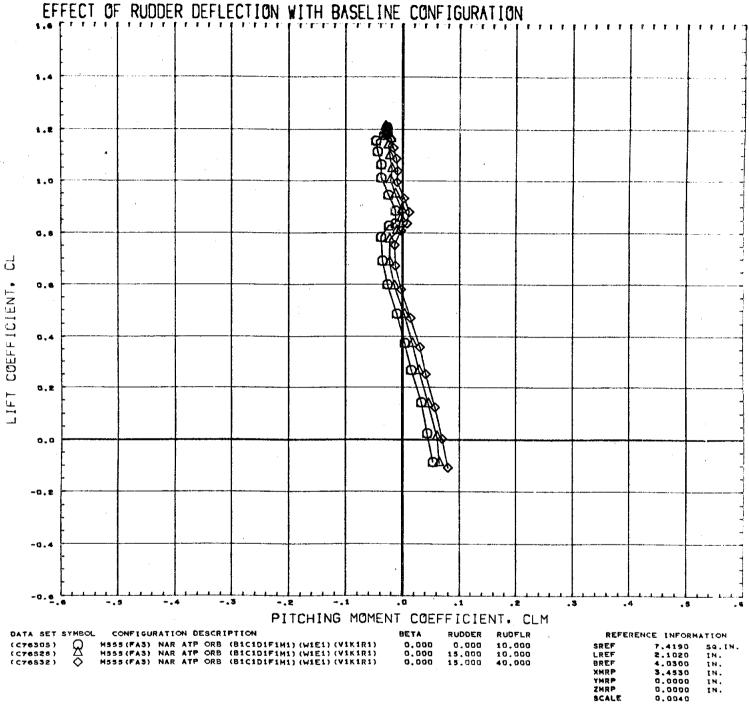
MACH 4.96



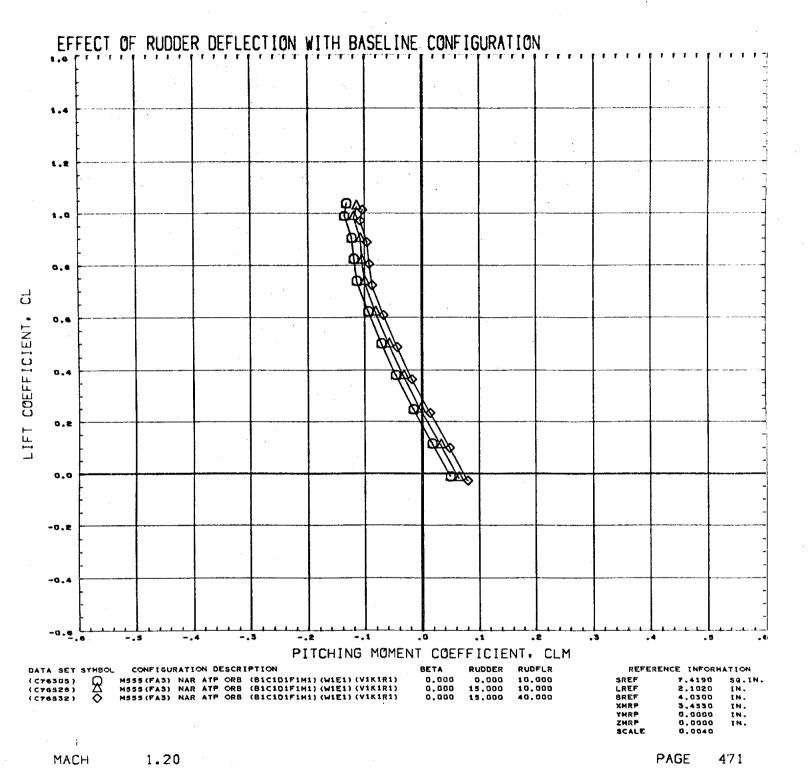
PAGE 469

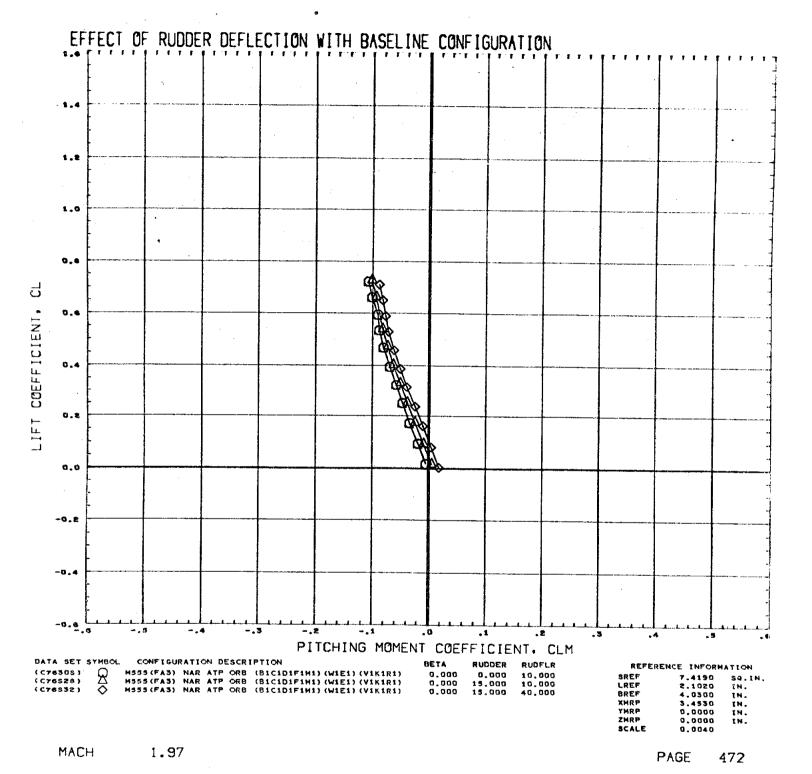
MACH

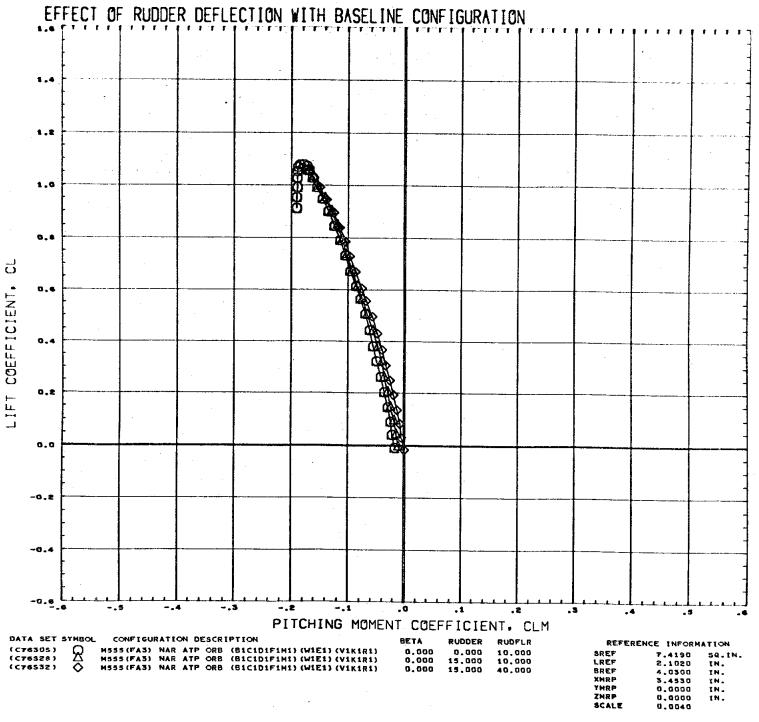
.59



MACH .90

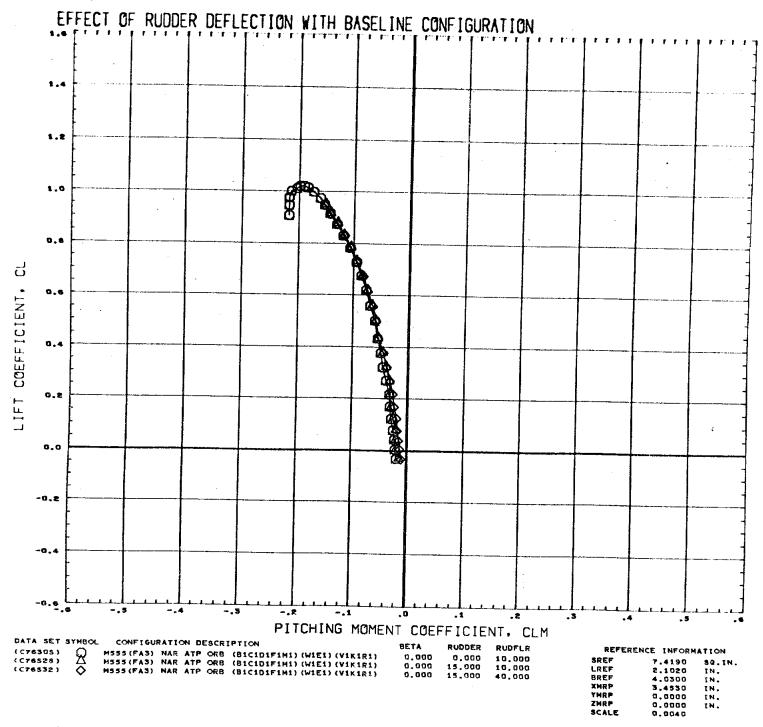






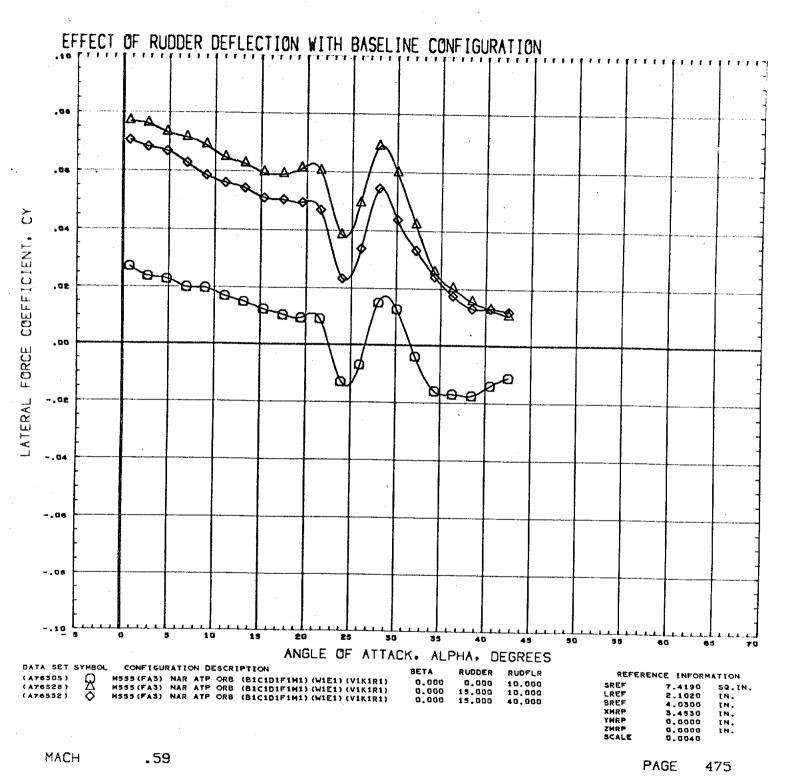
MACH

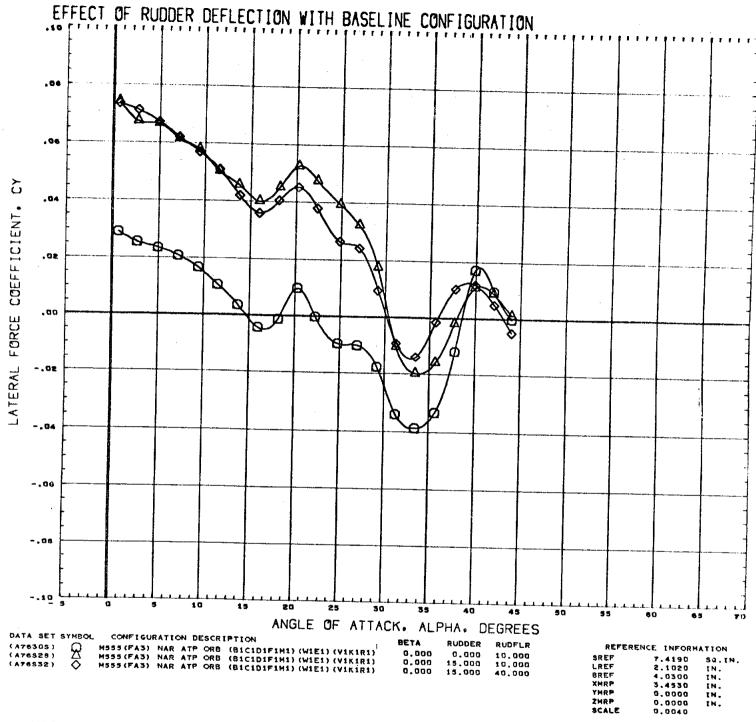
2.99

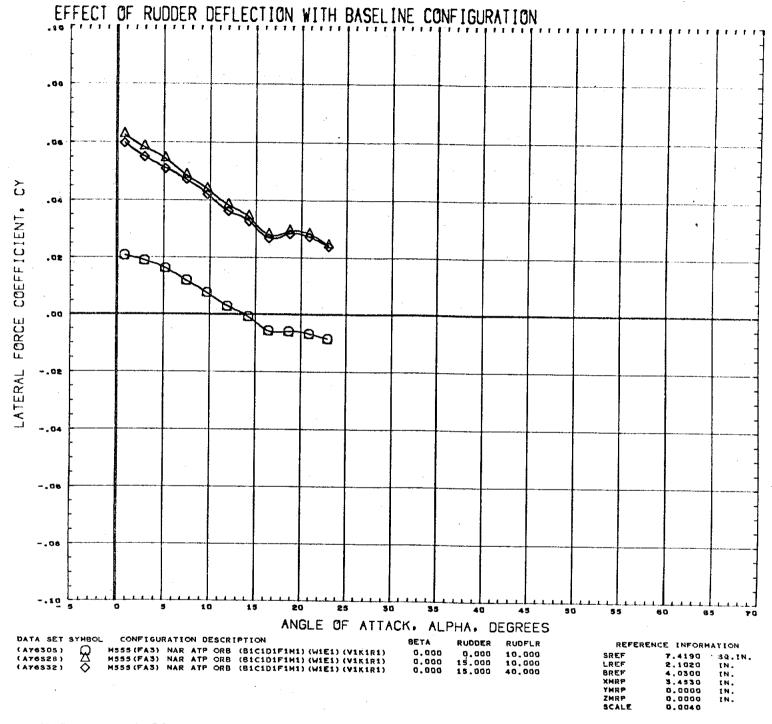


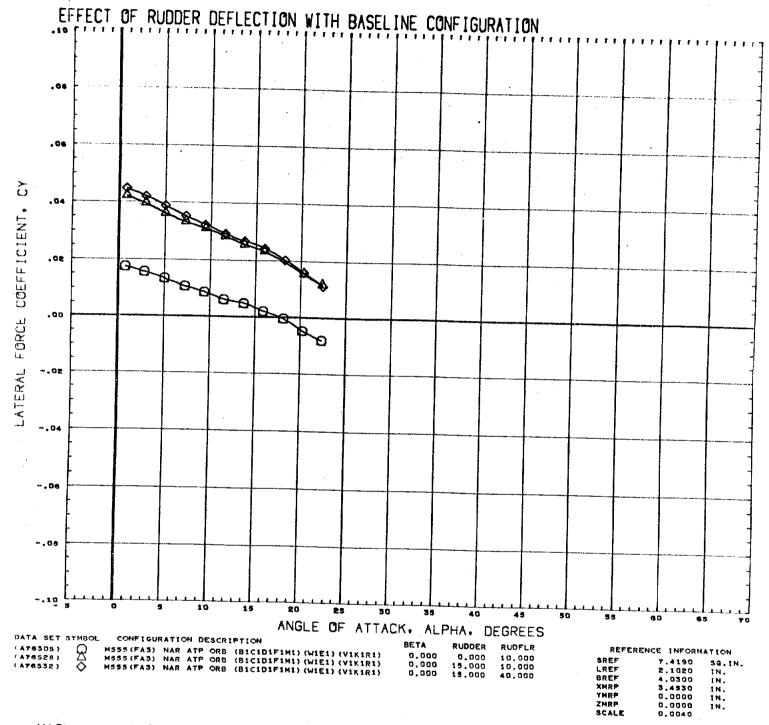
MACH

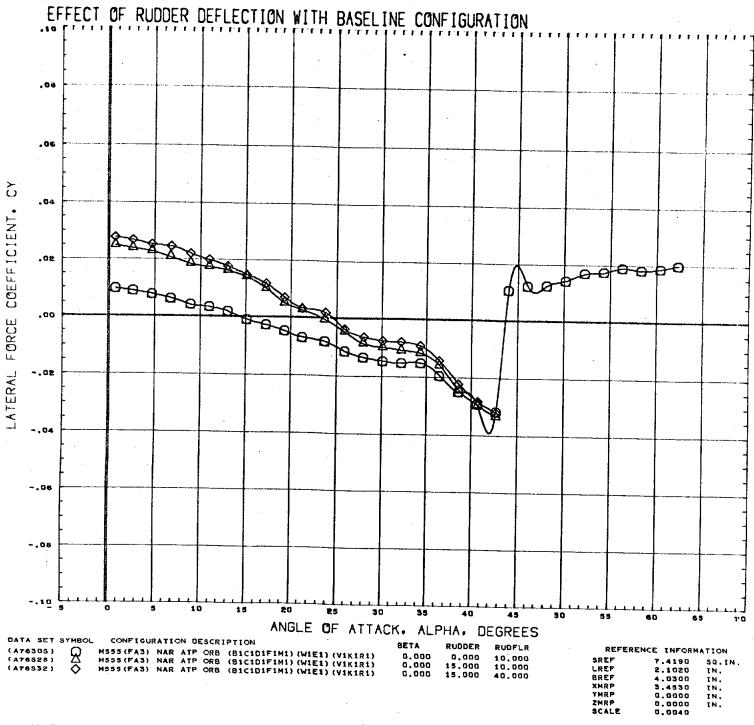
4.96

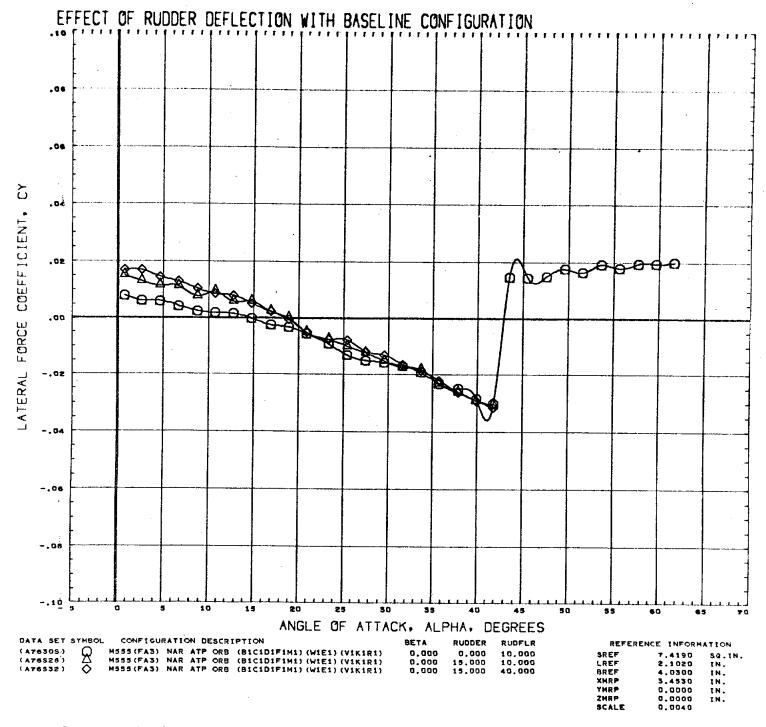


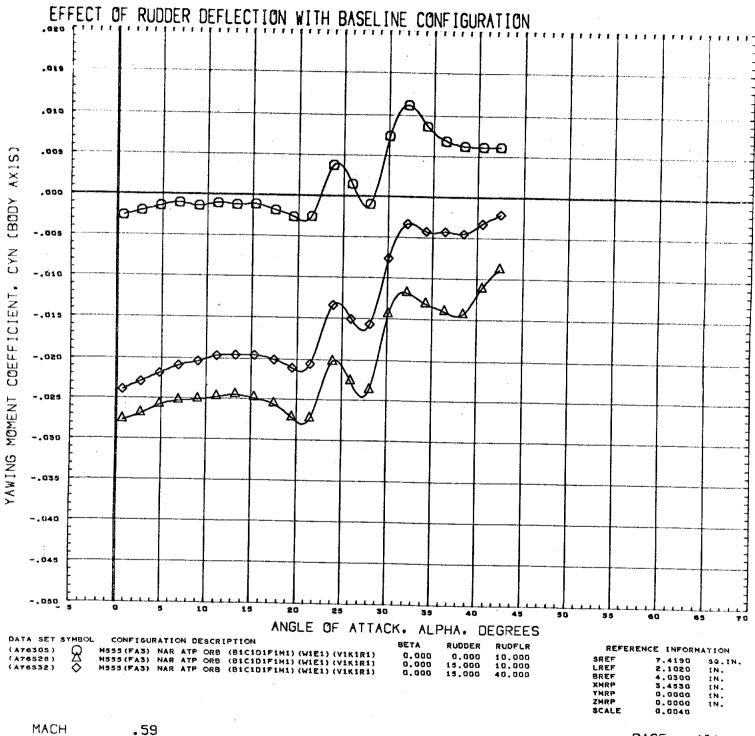


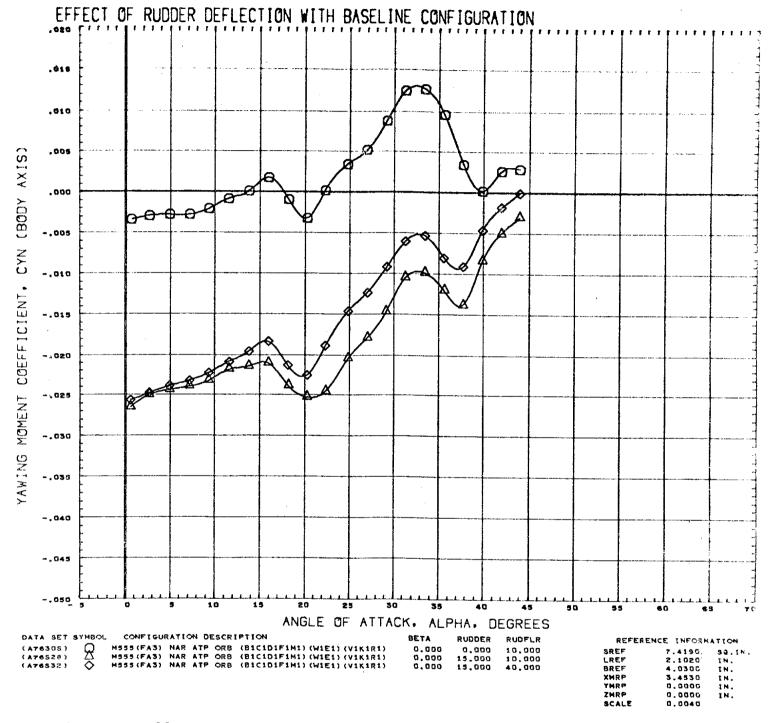


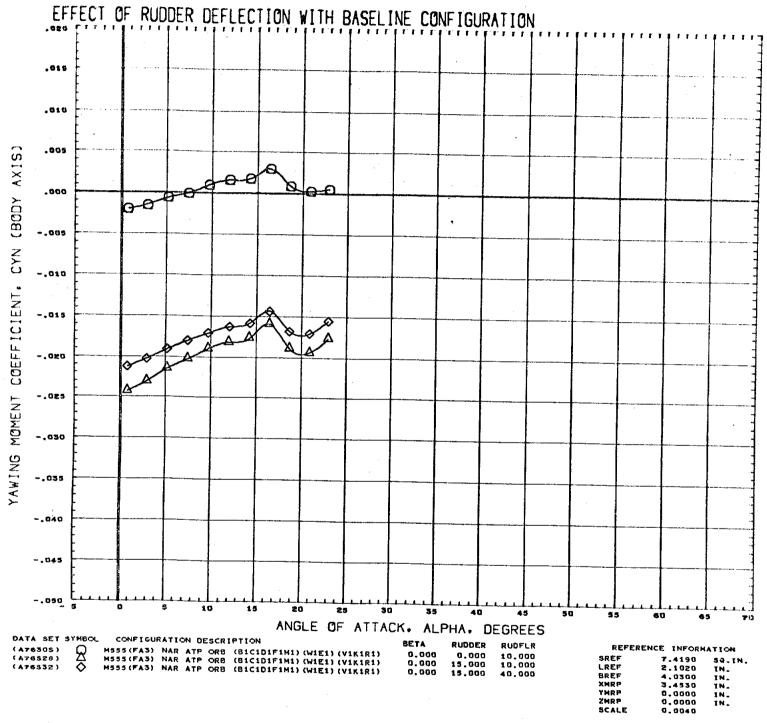


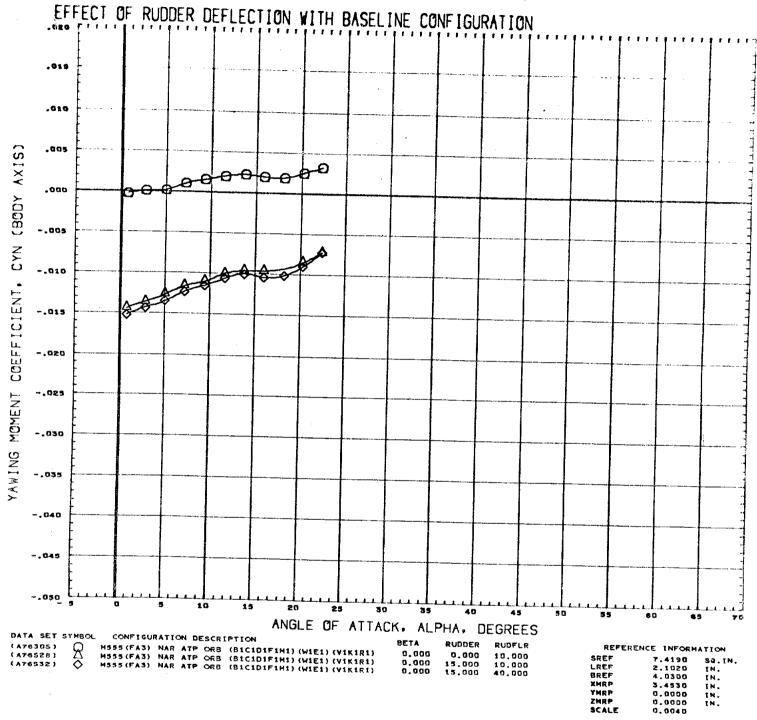


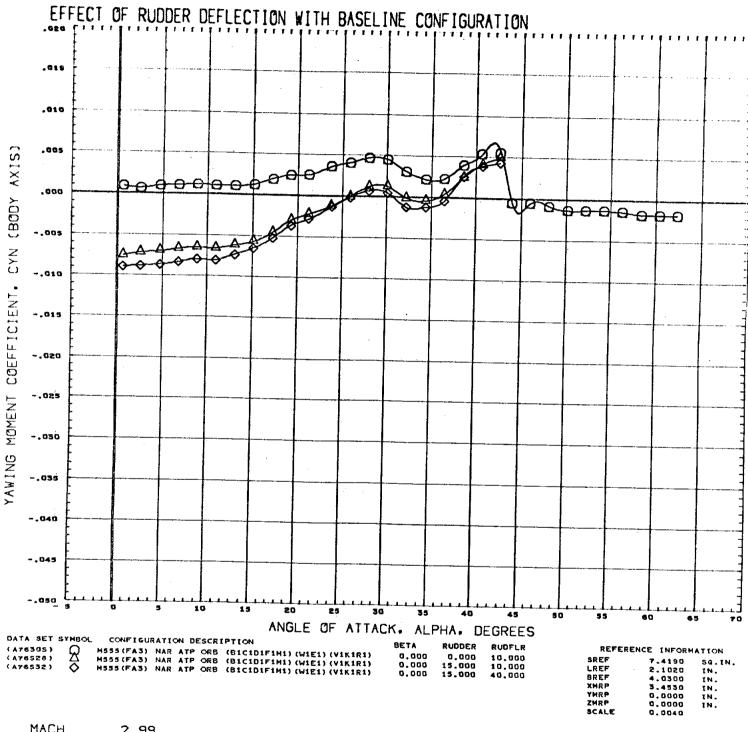






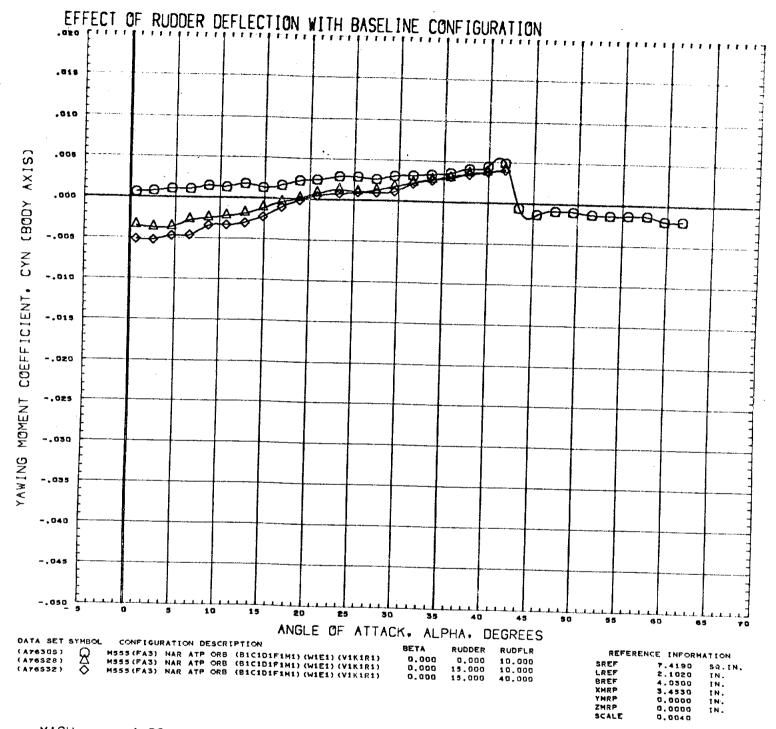


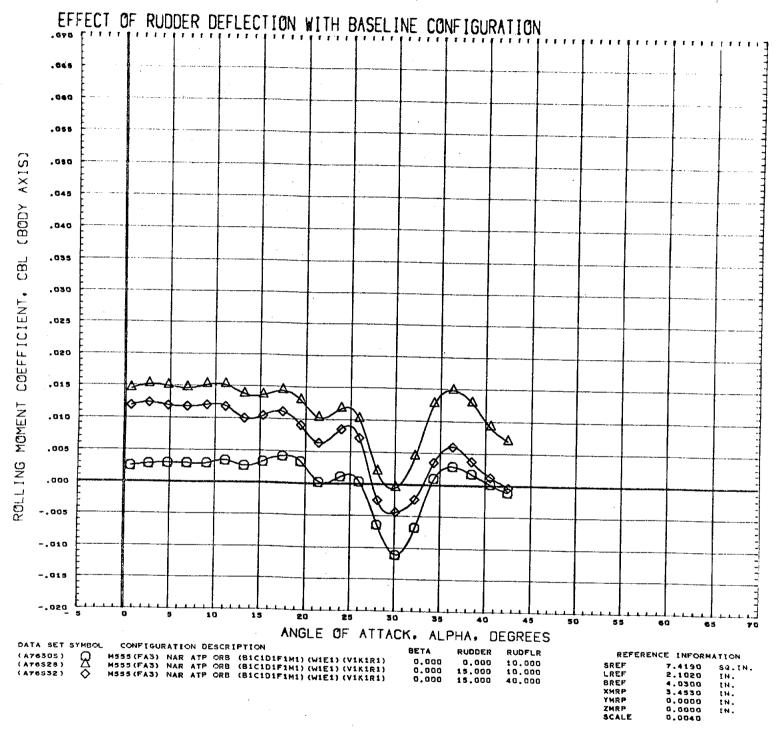




MACH

2.99



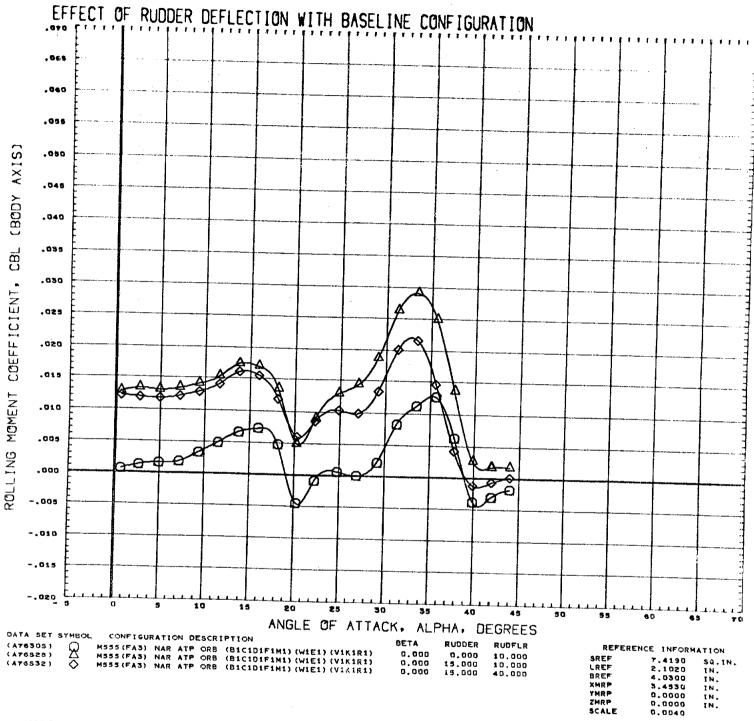


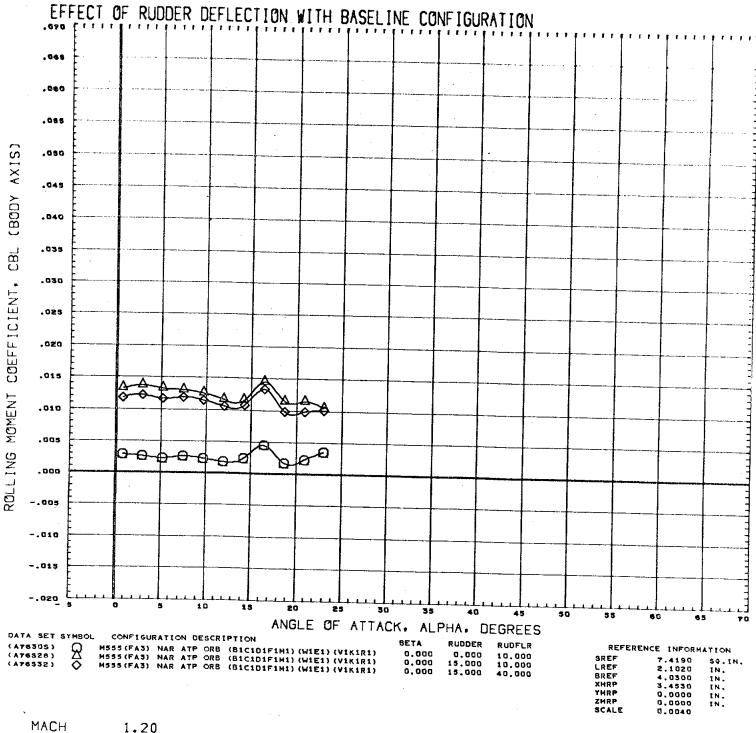
MACH

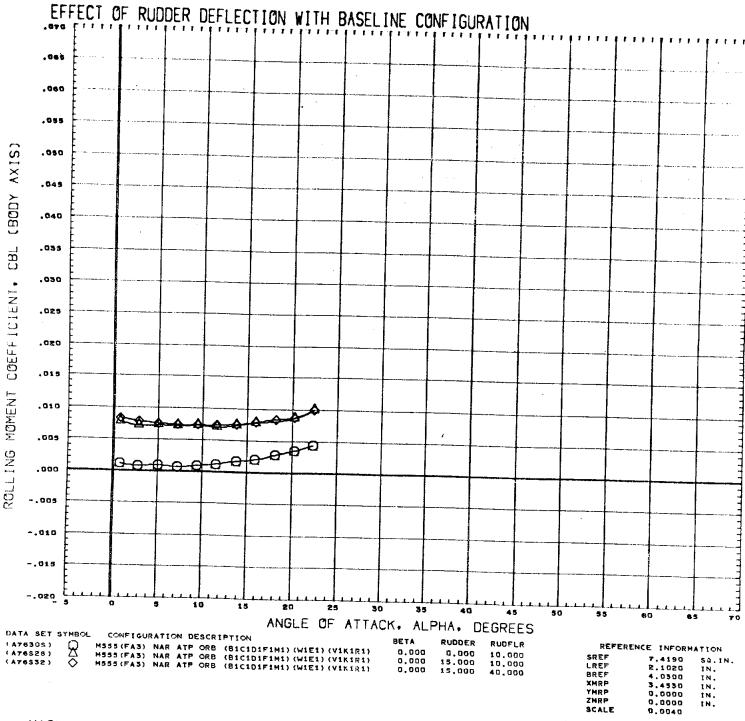
.59

PAGE

487





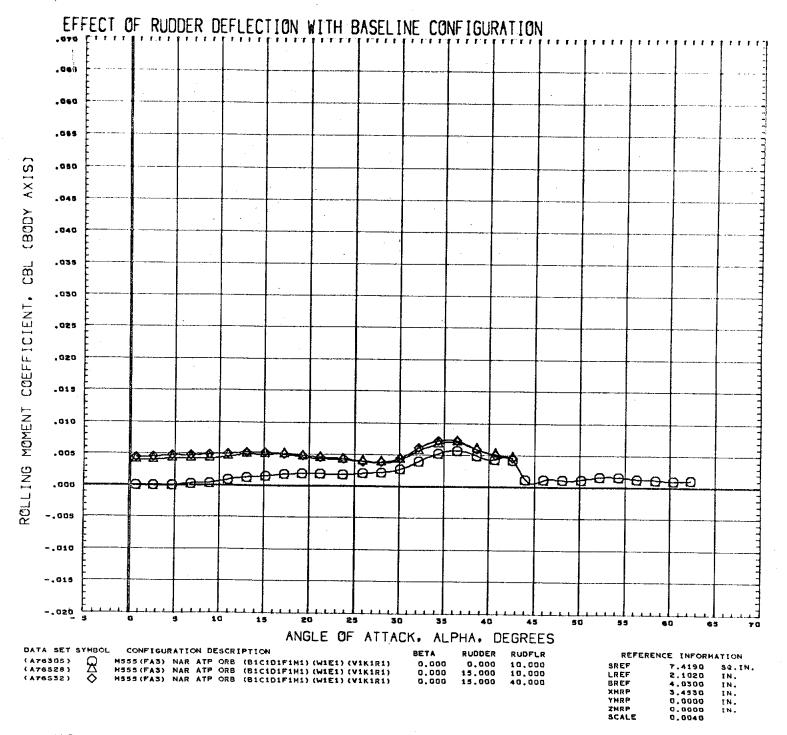


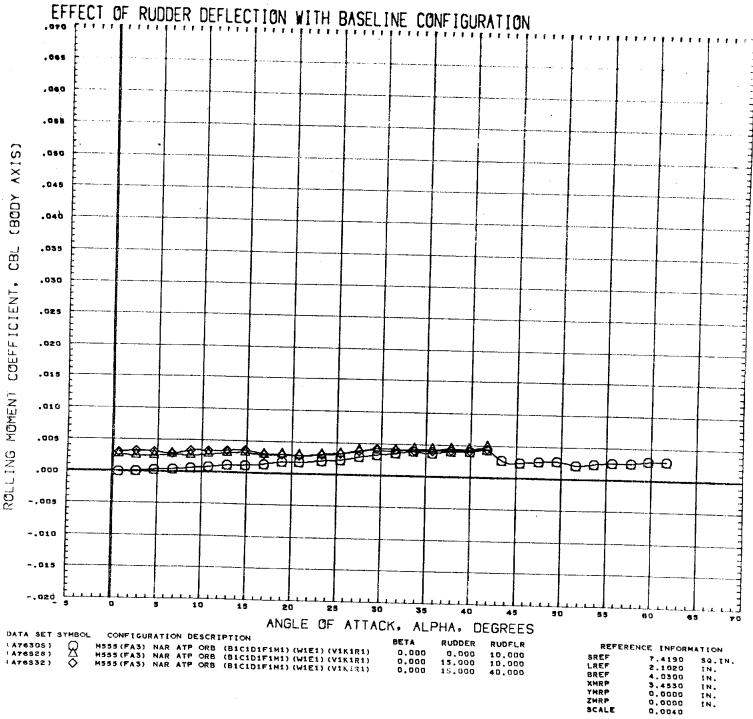
MAÇH

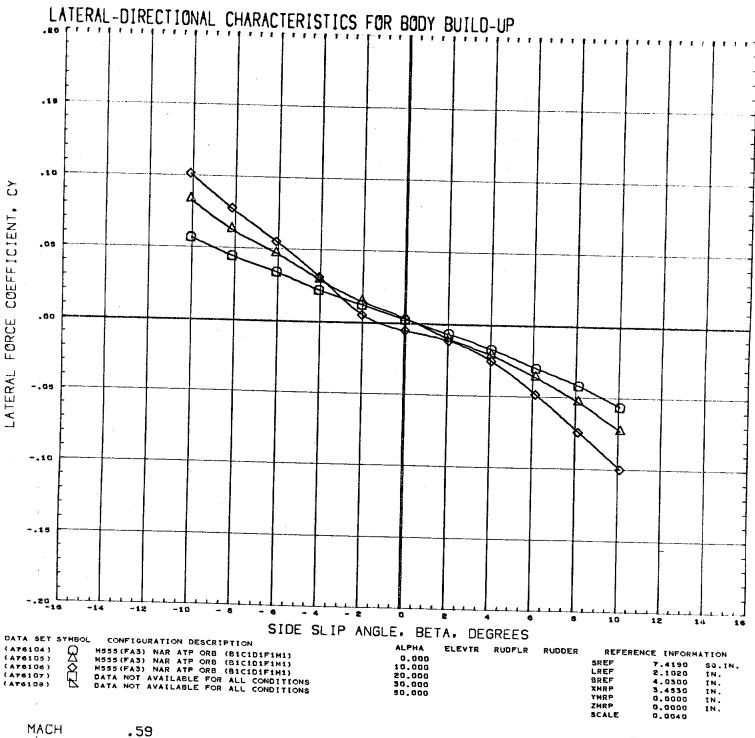
1.97

PAGE

490

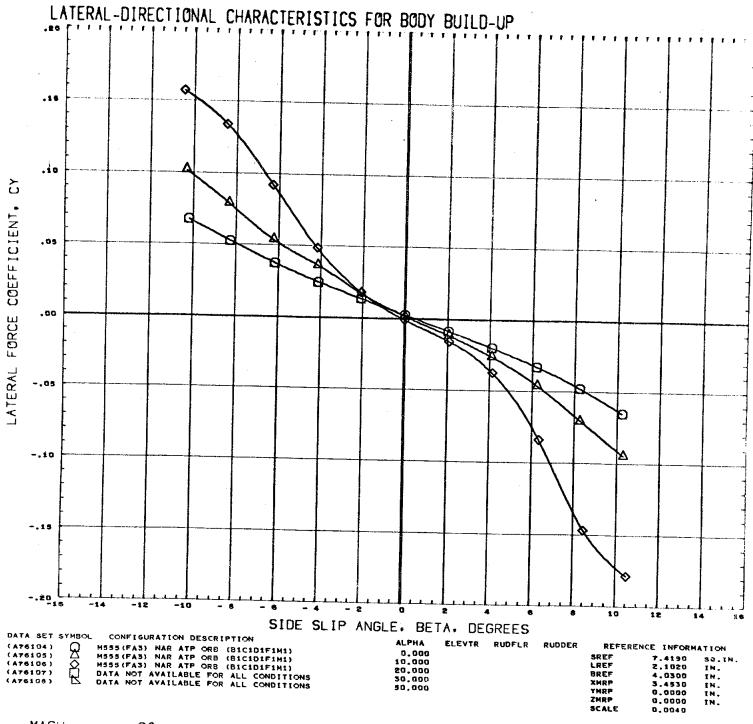


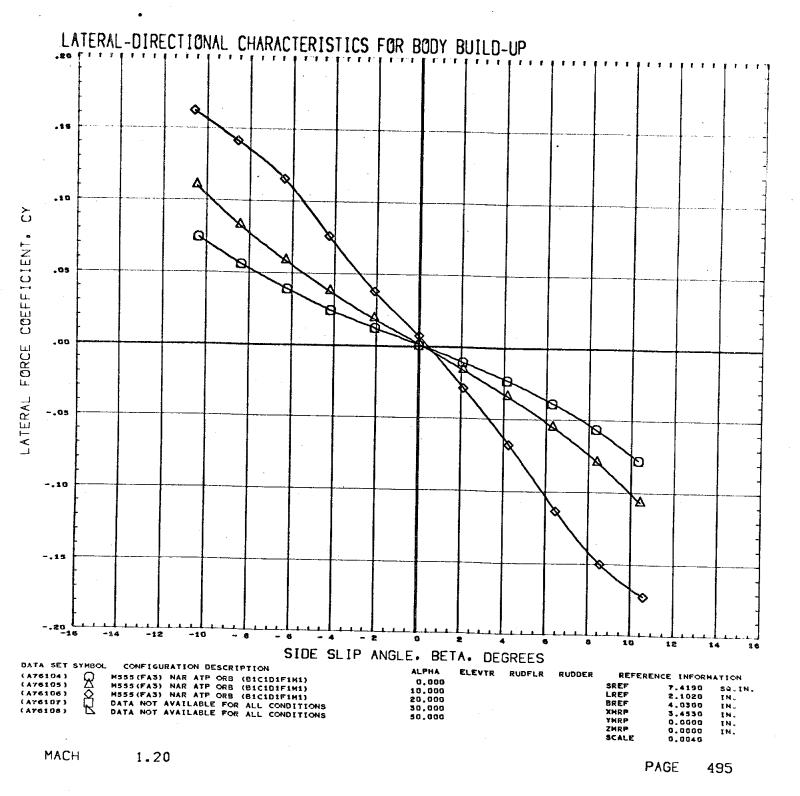


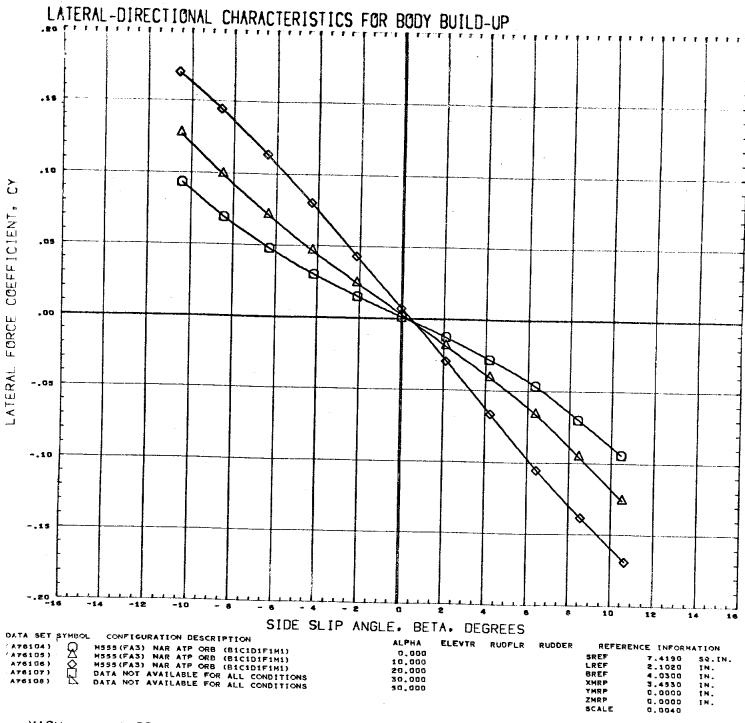


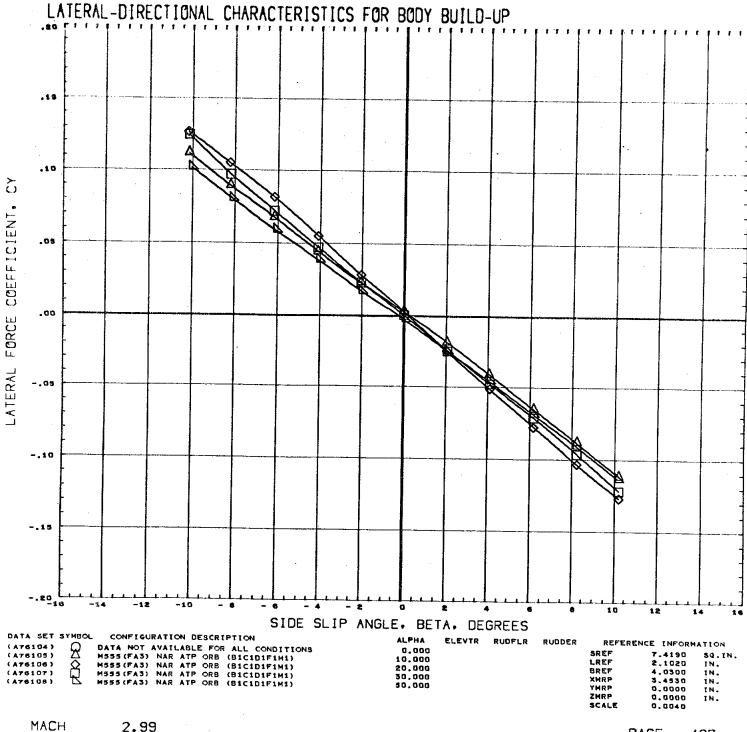
PAGE

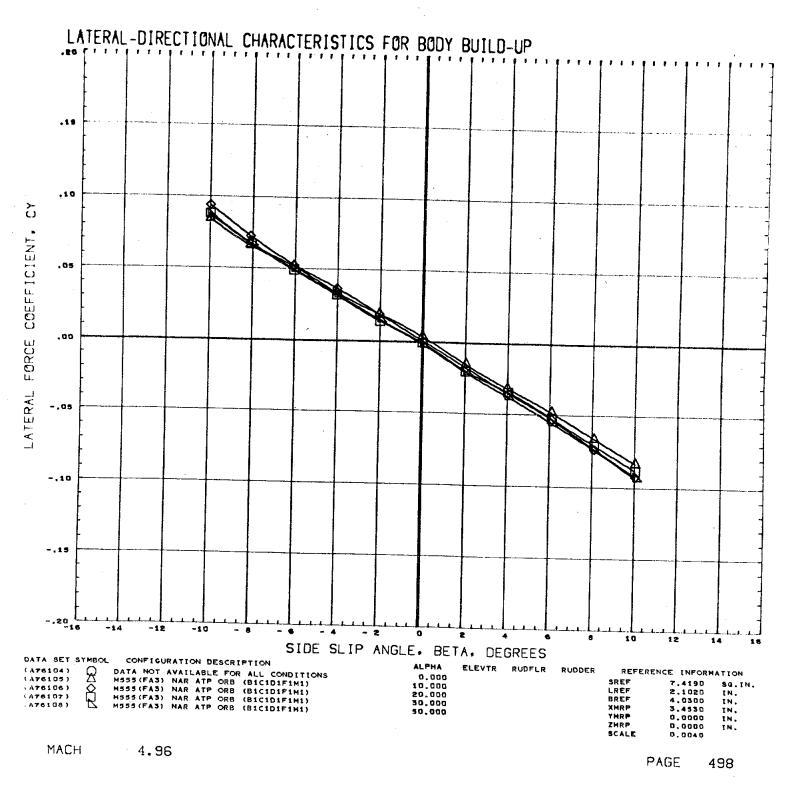
493

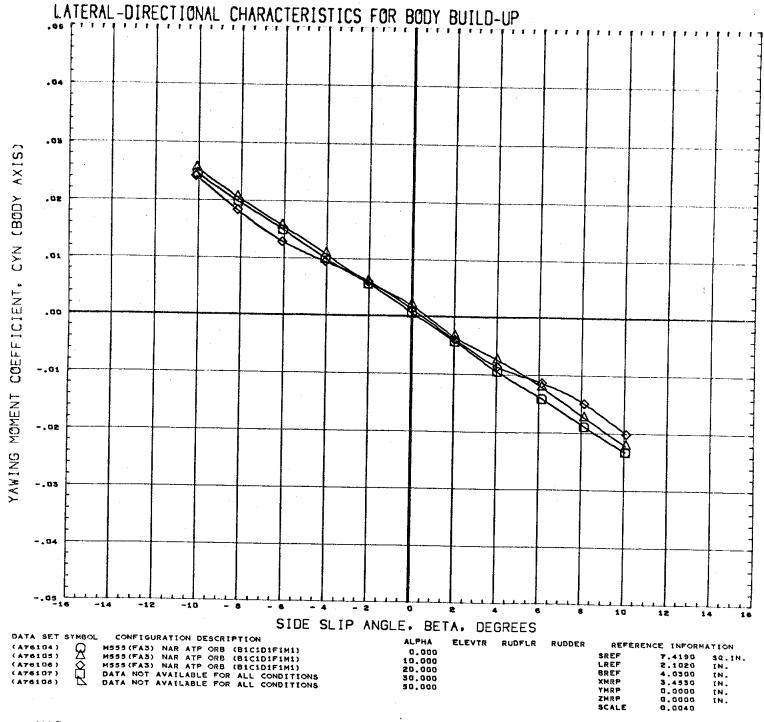


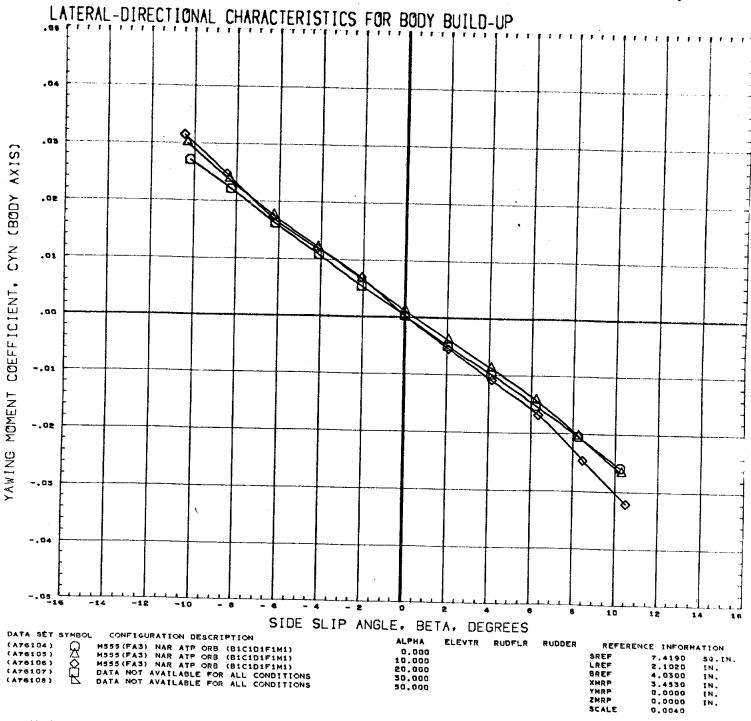


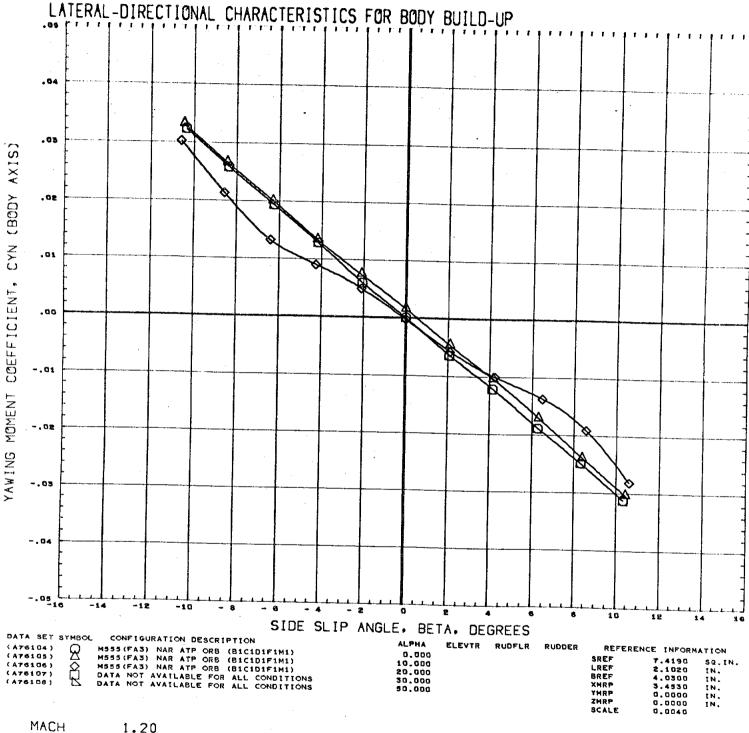




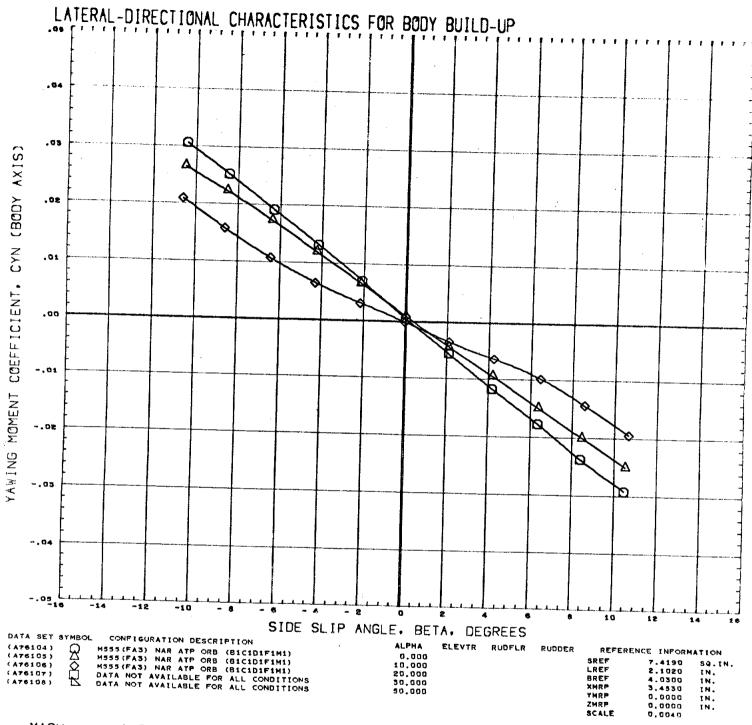


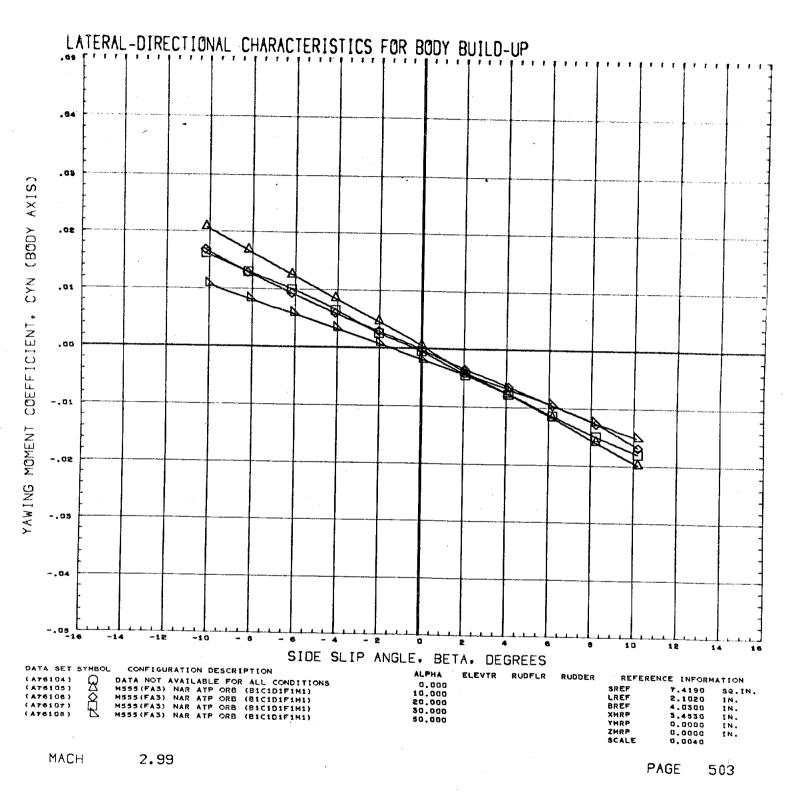


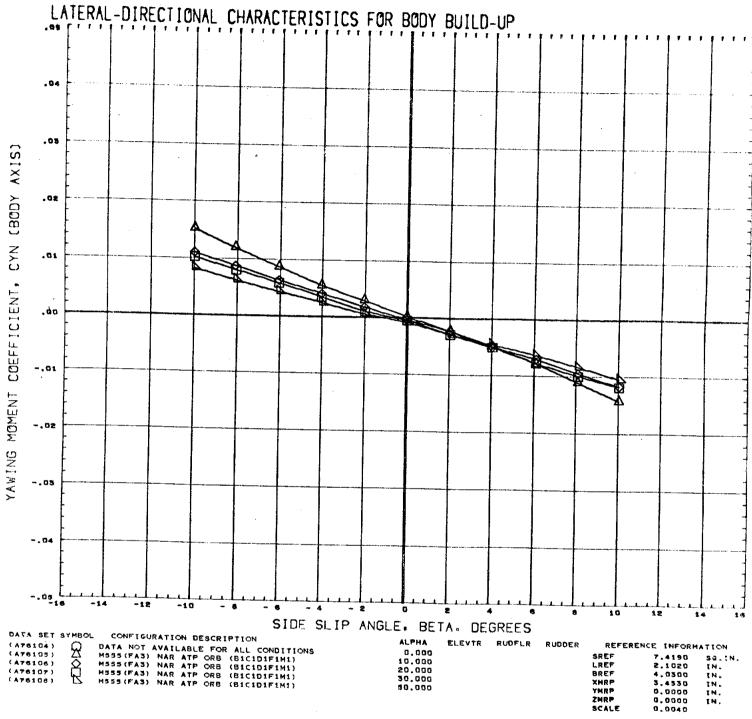


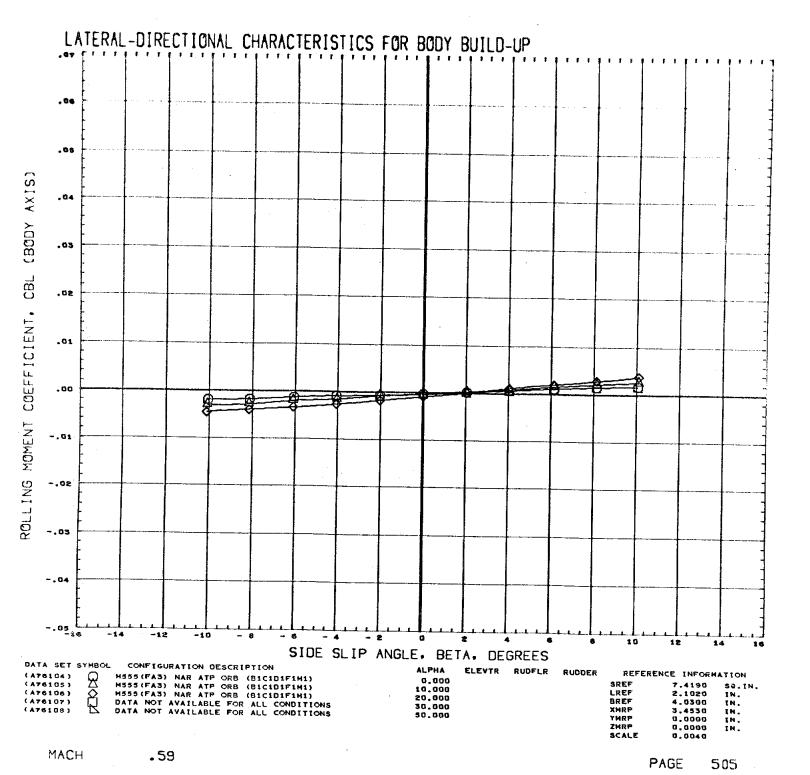


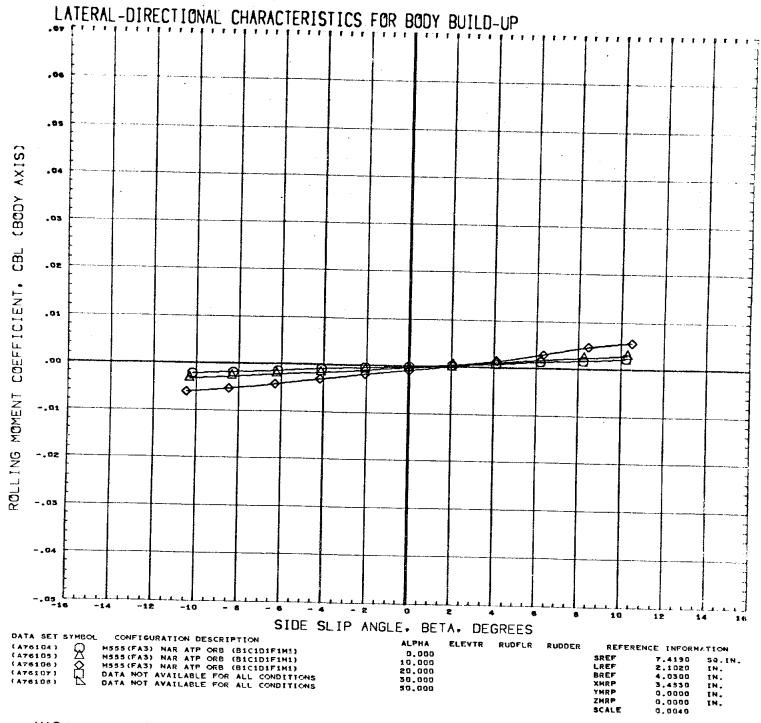
1.20

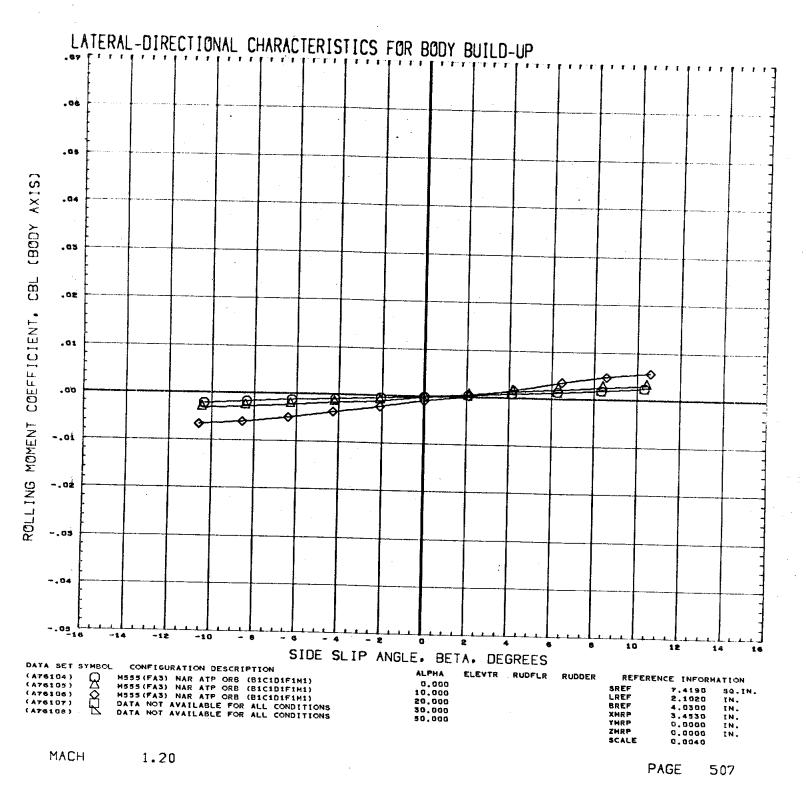


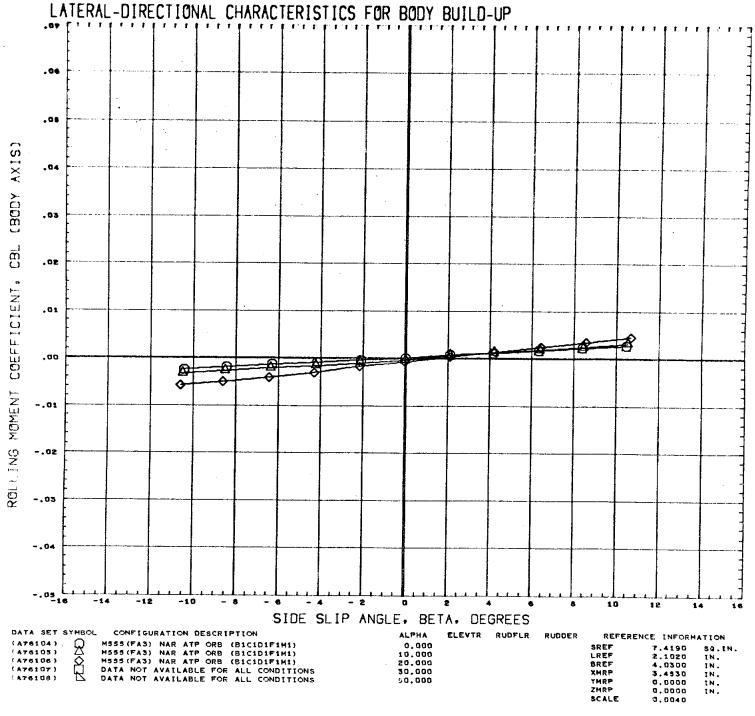


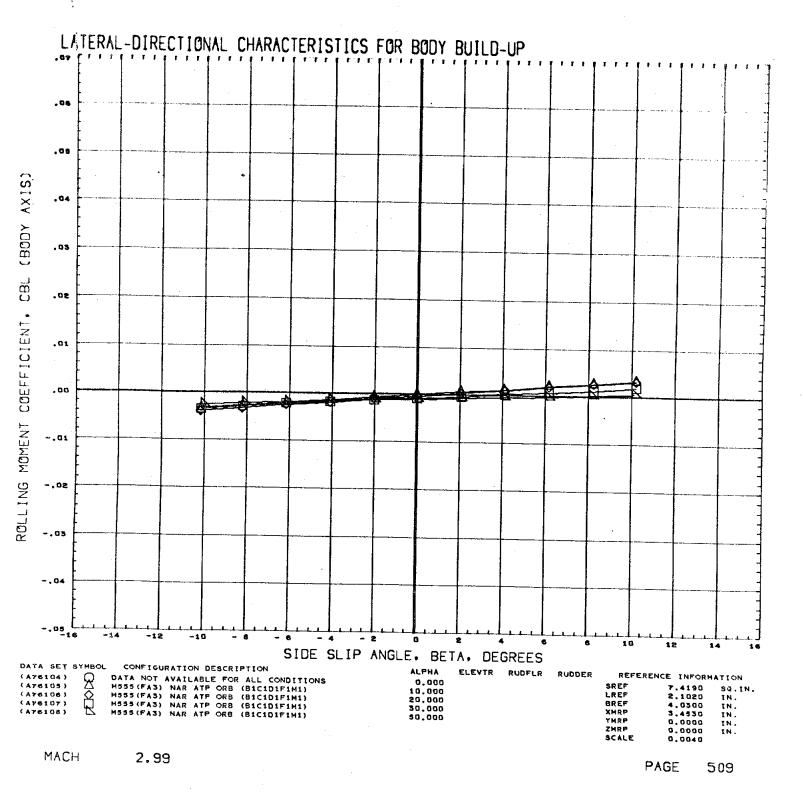


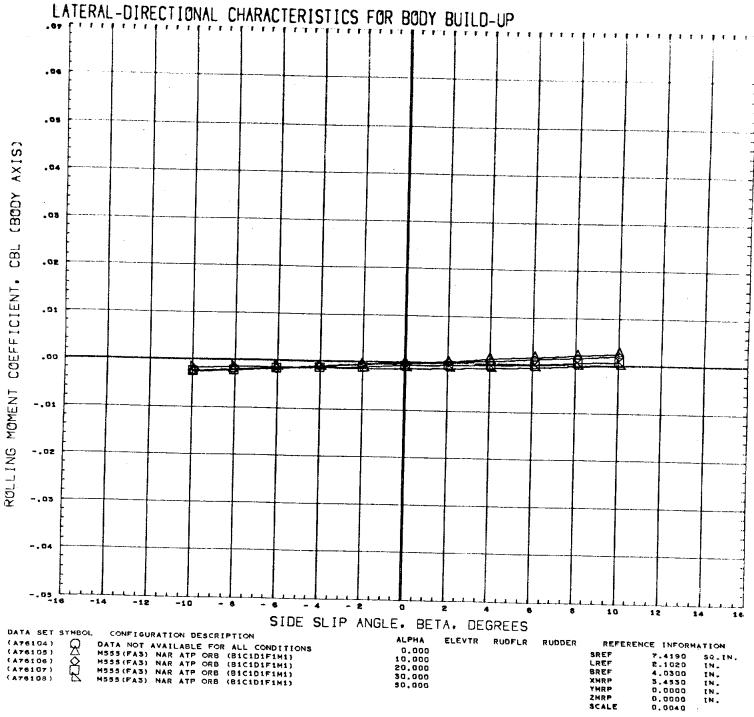




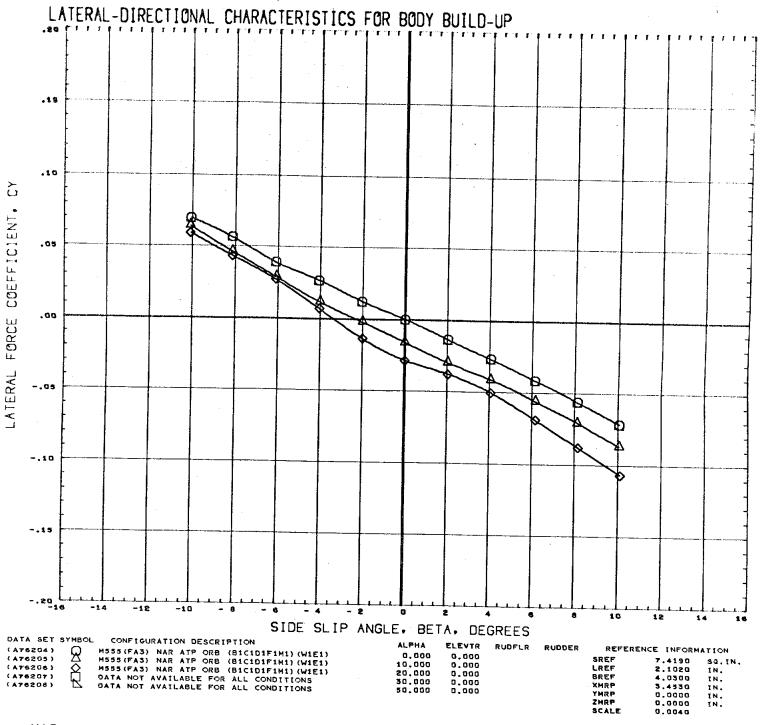


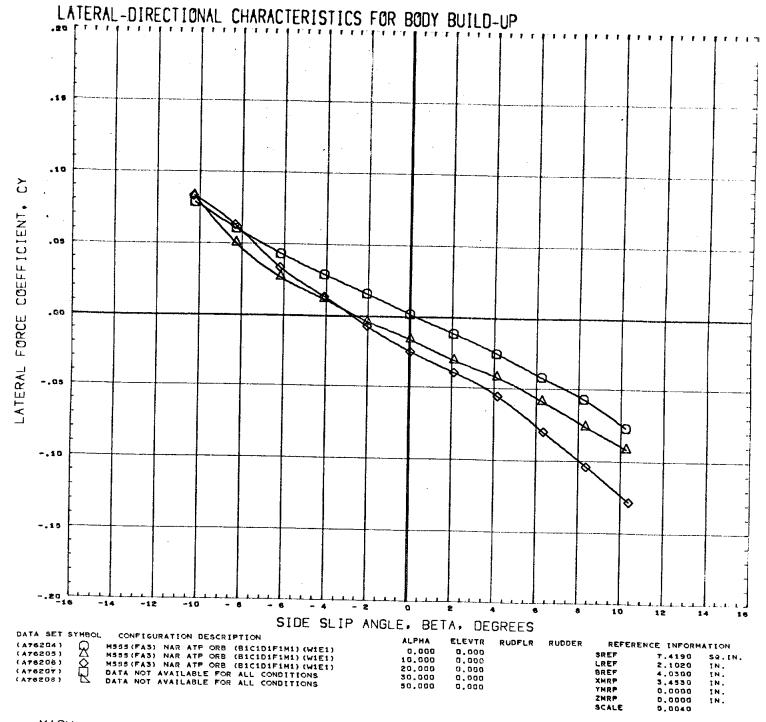


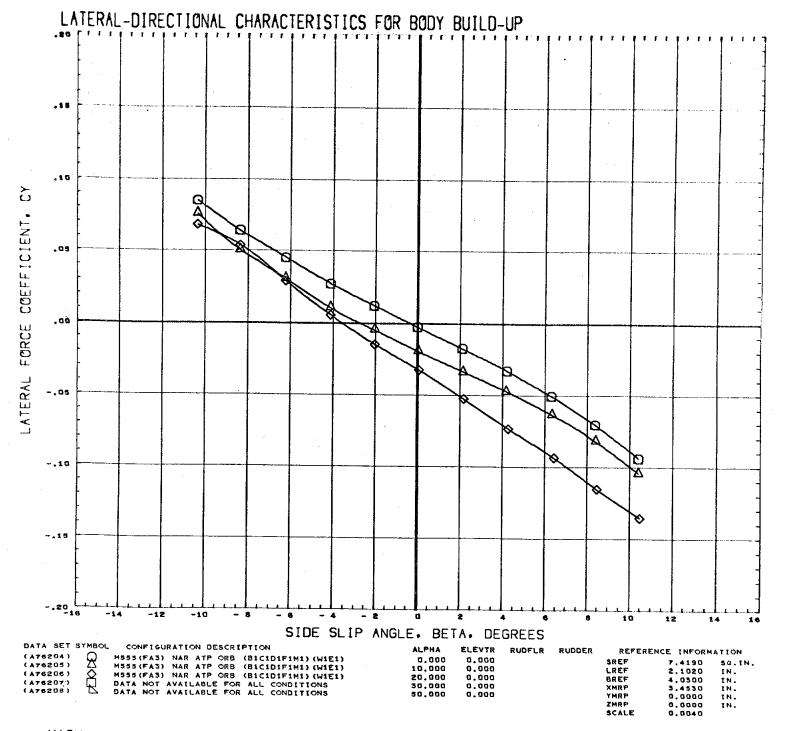




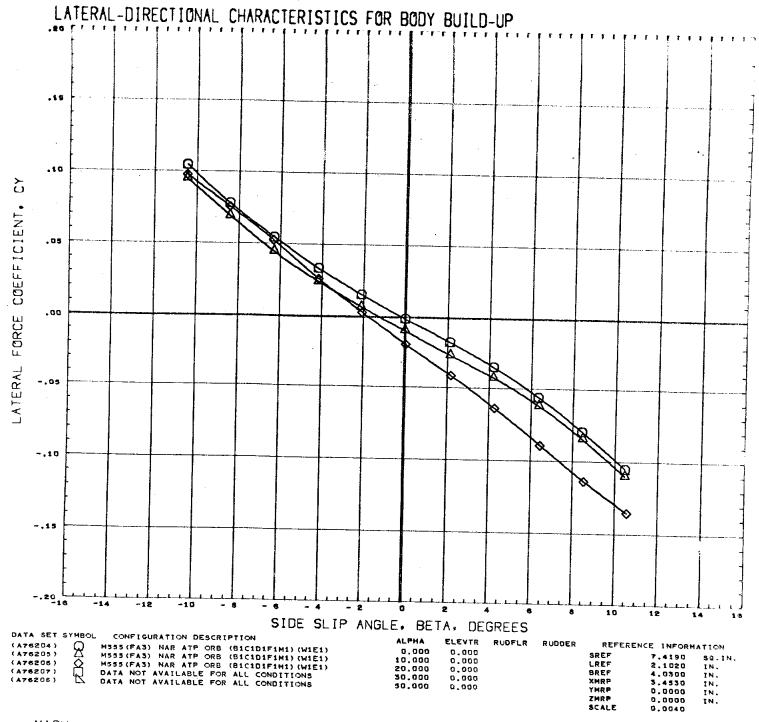
MACH 4.96

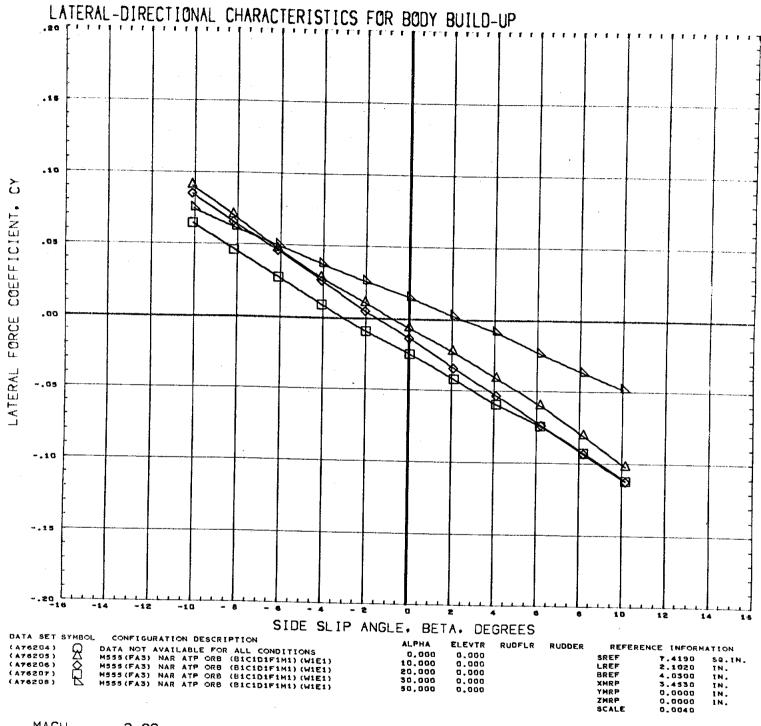




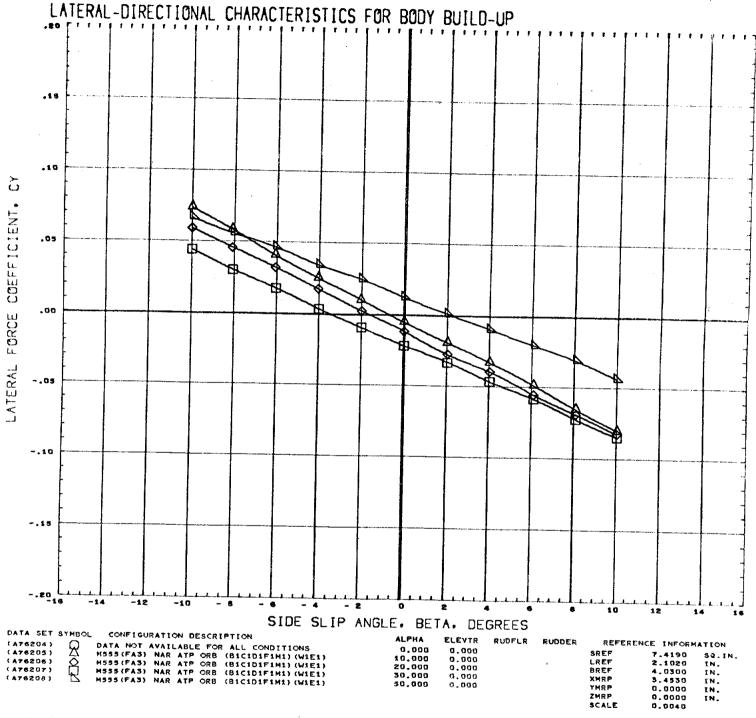


1.20

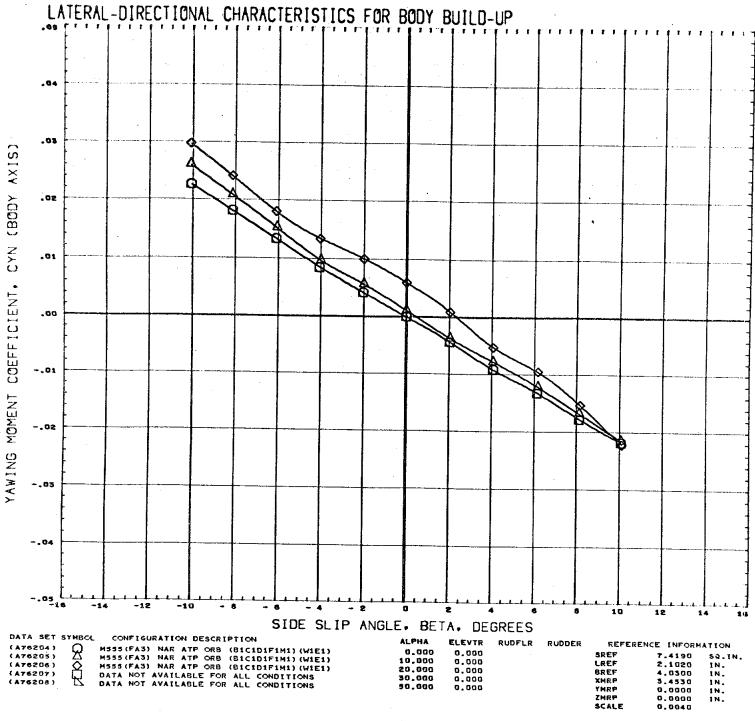




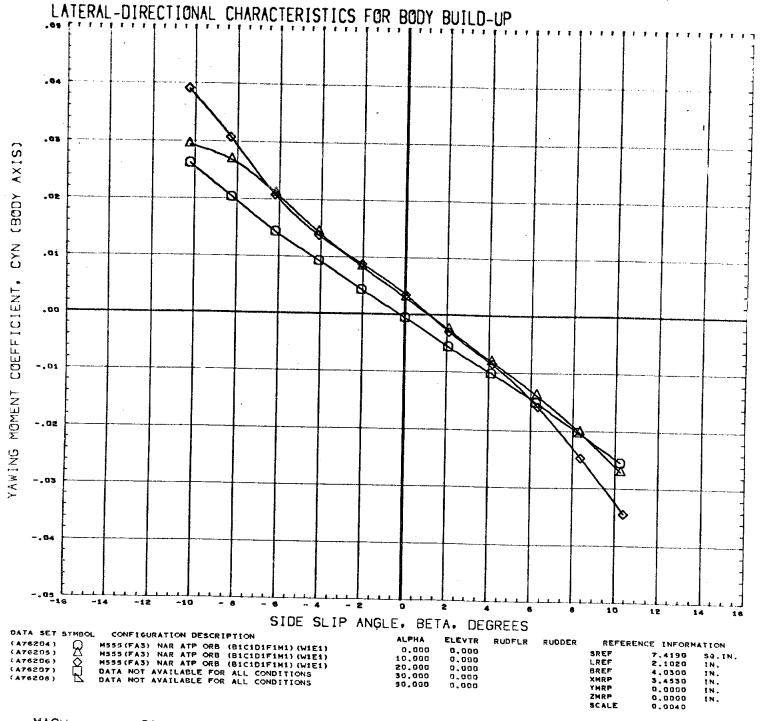
2.99

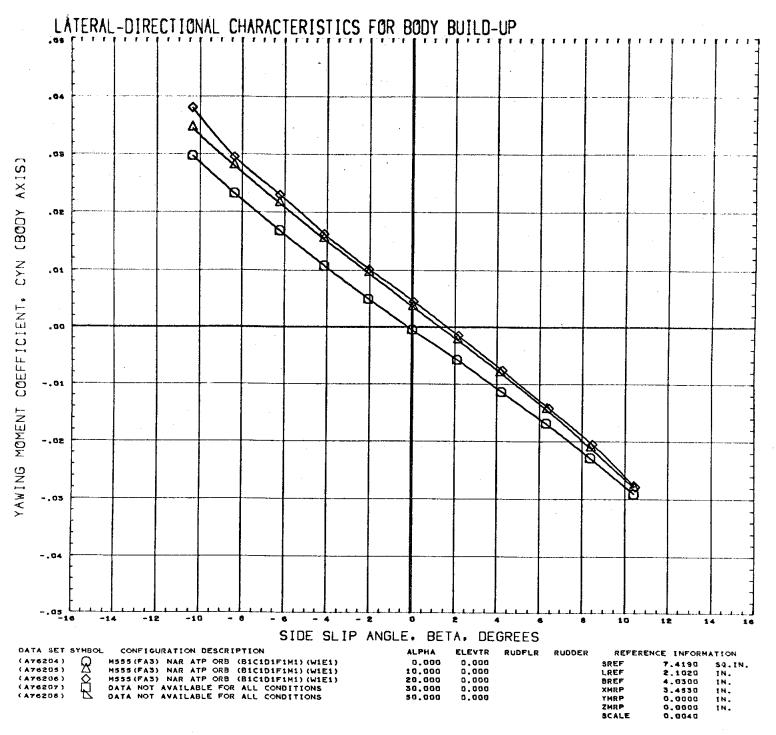


MACH 4.96

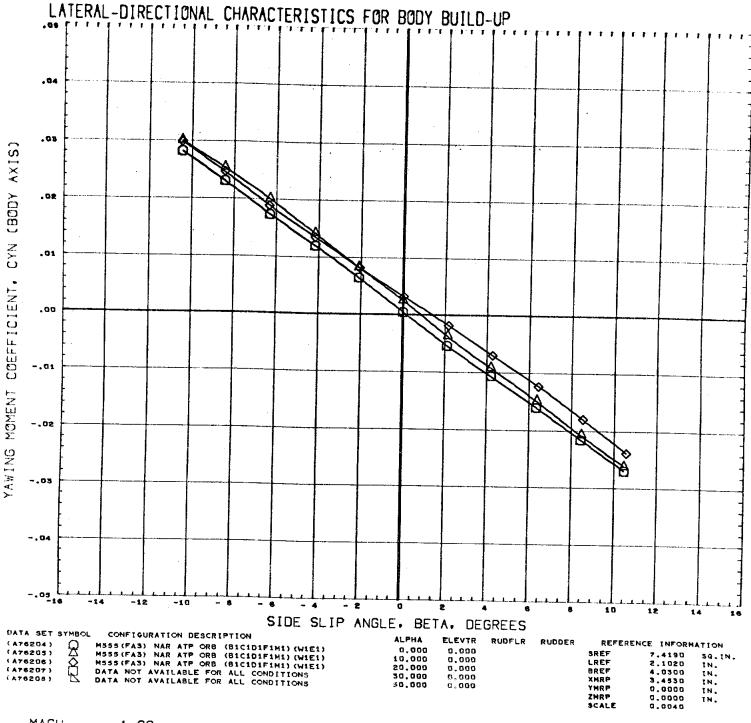


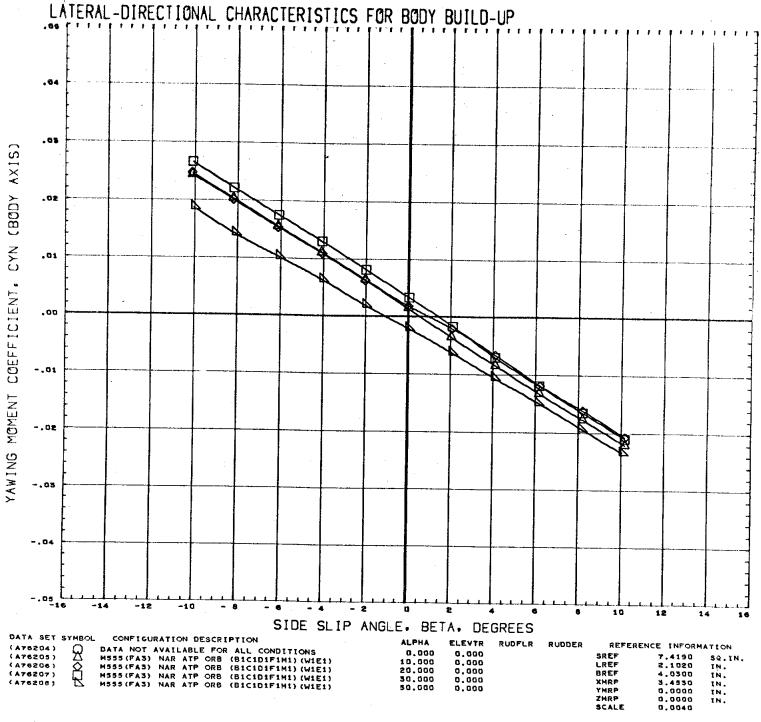
.60



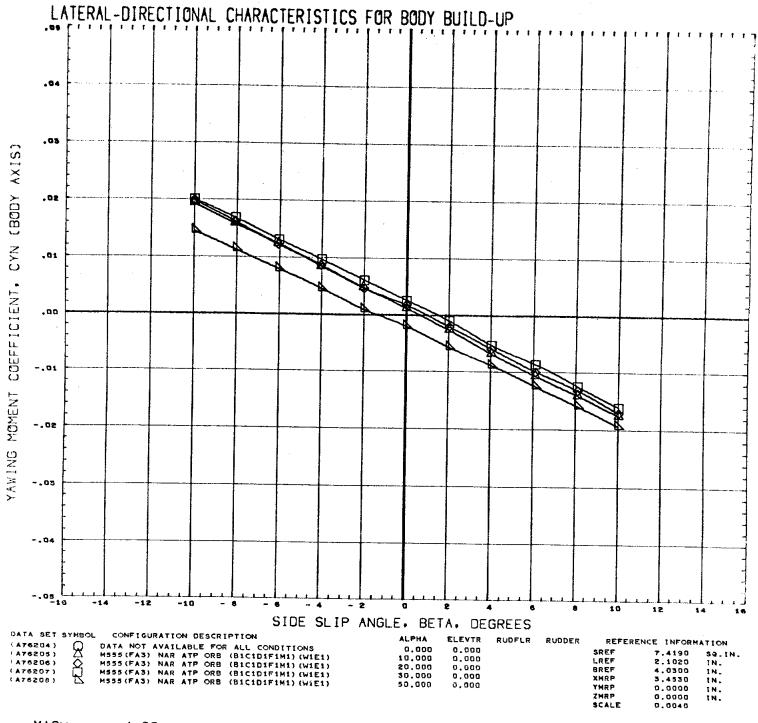


1.20

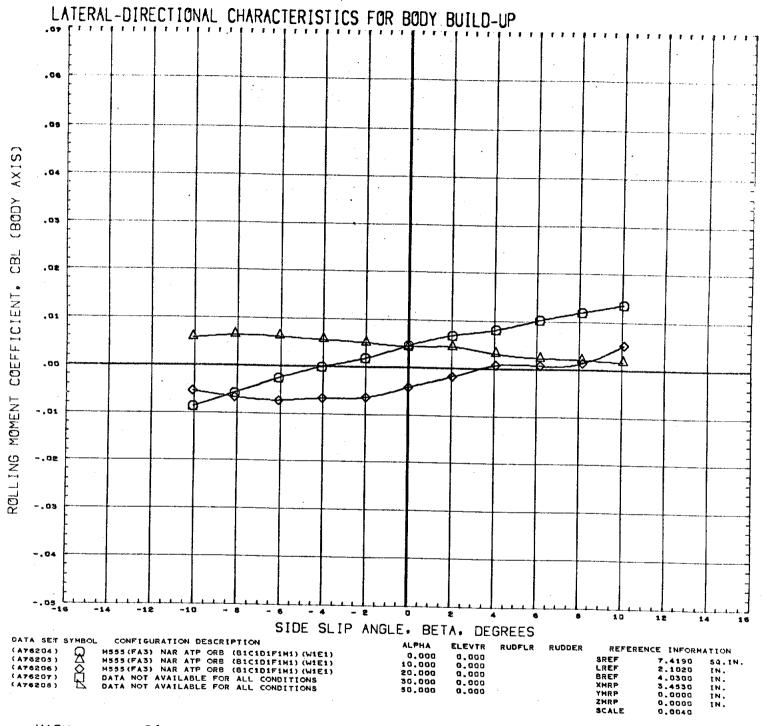


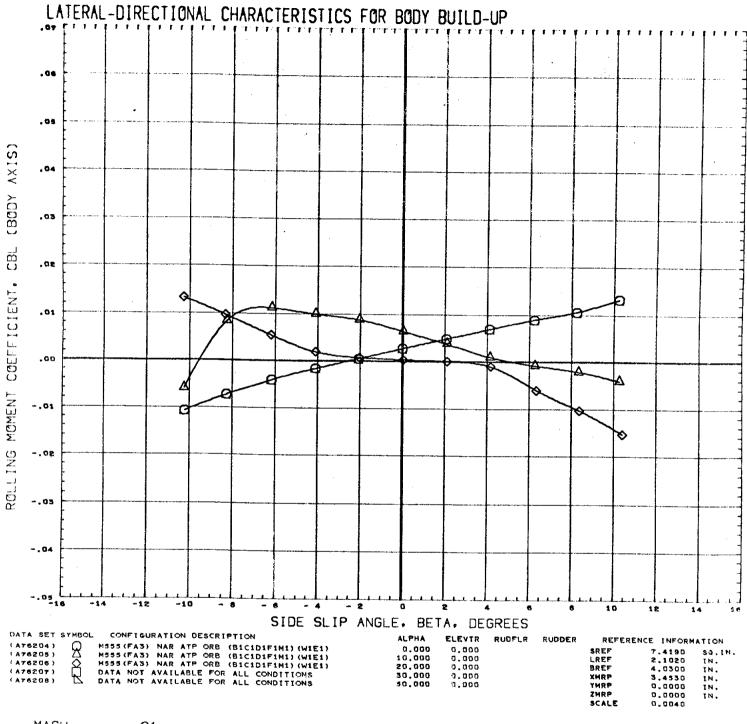


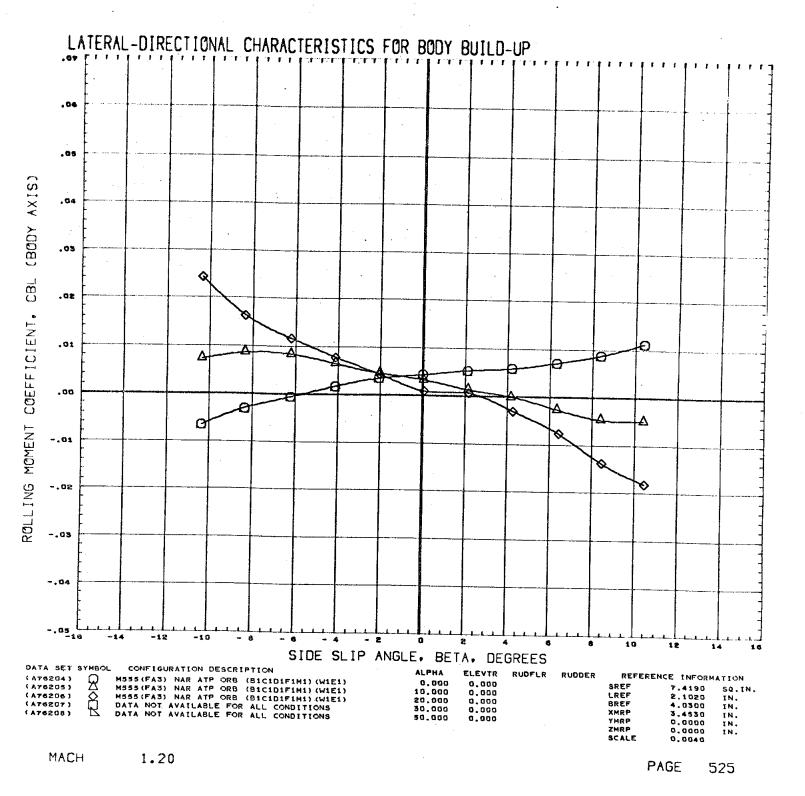
MACH 2.99

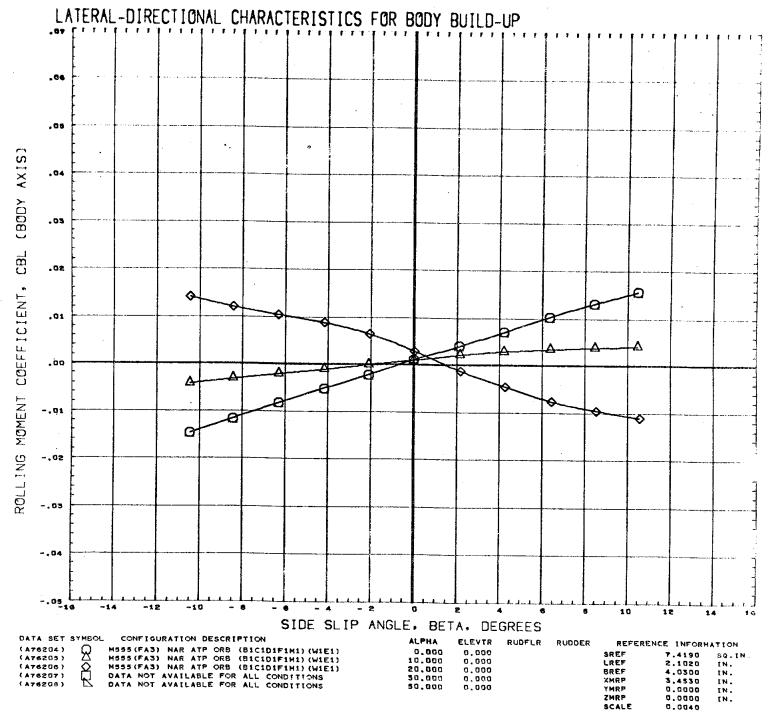


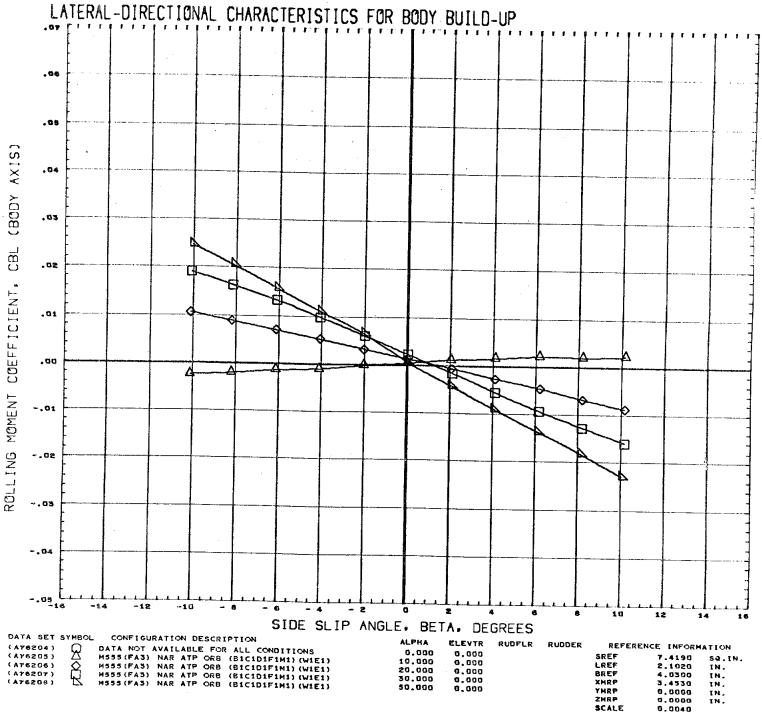
MACH 4.96



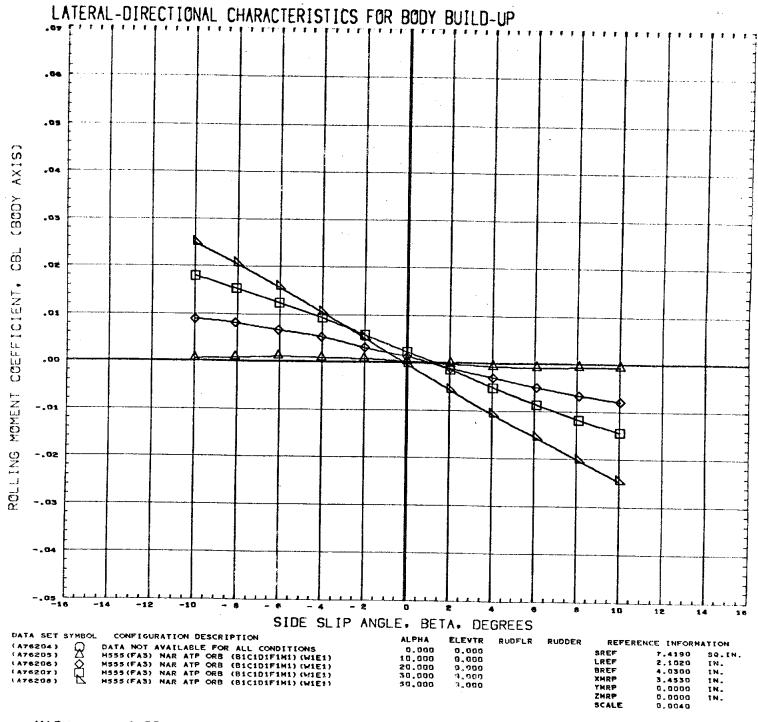




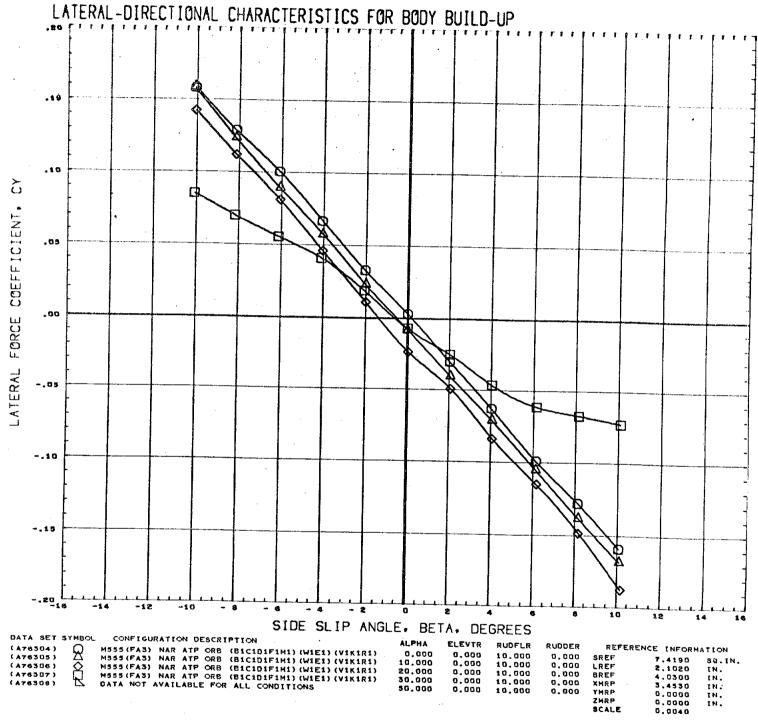




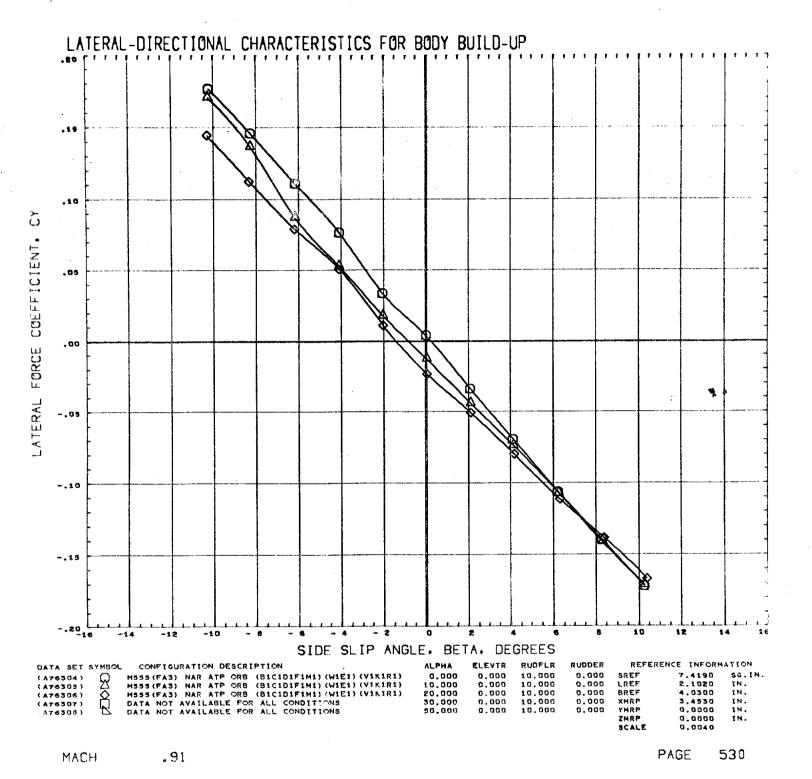
MACH 2.99

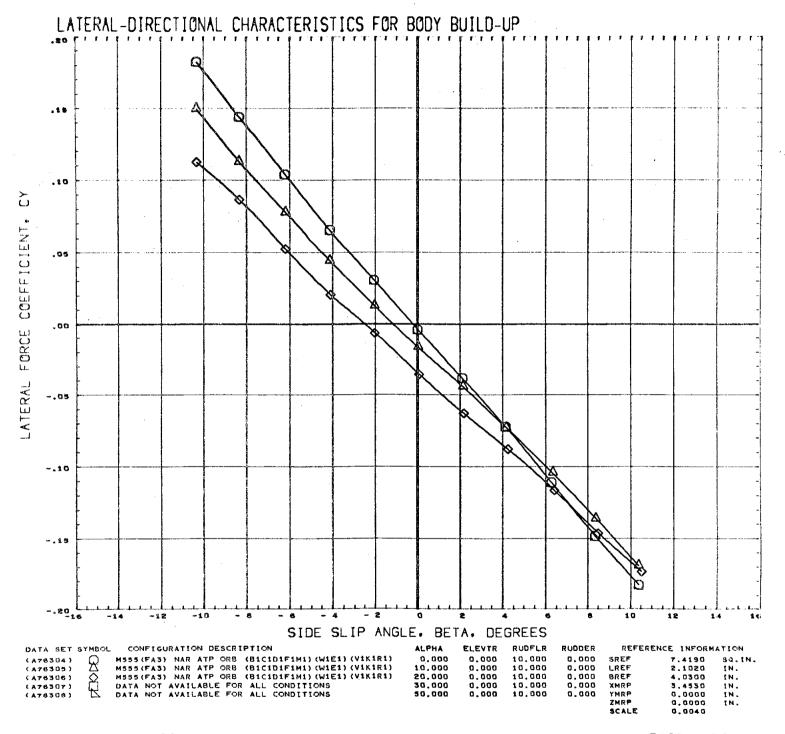


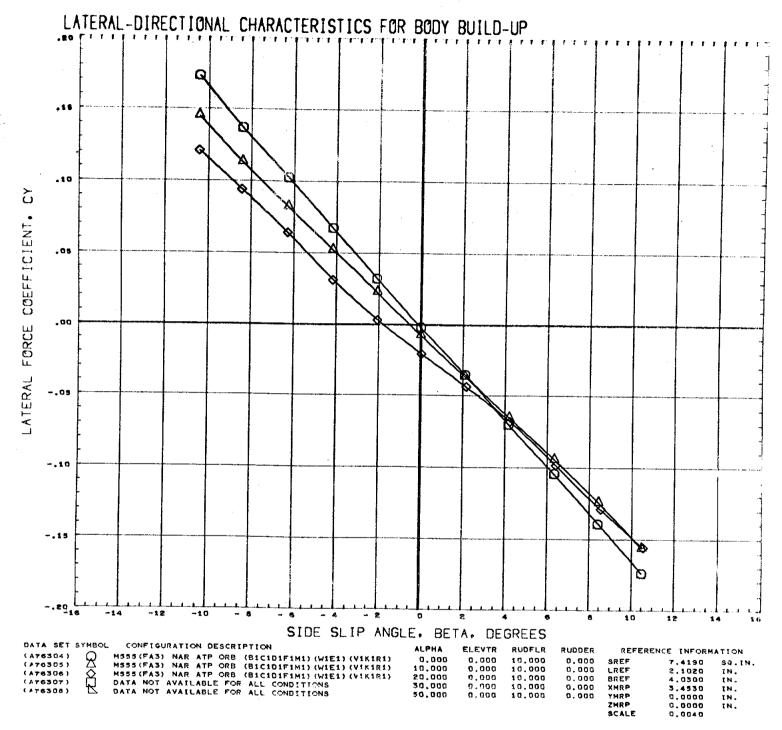
MACH 4.96

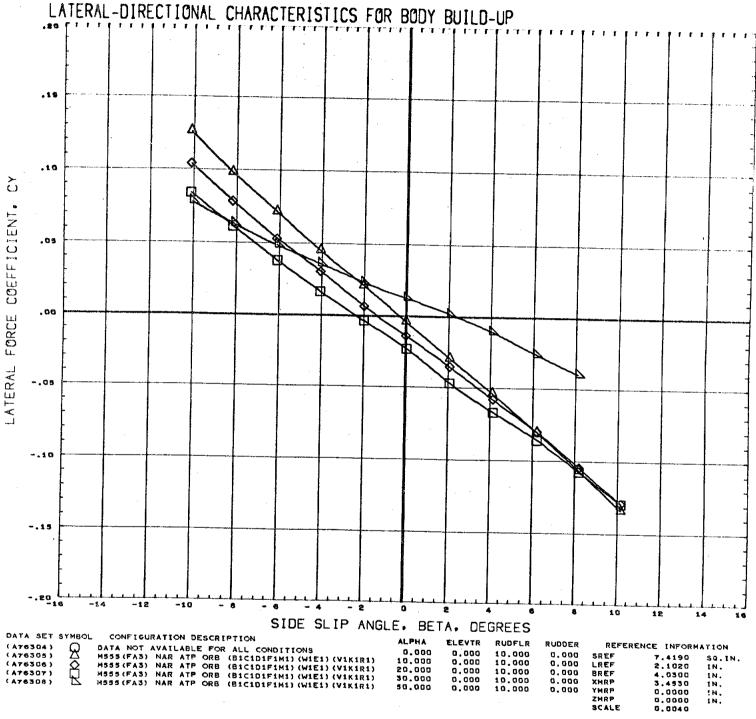


.60

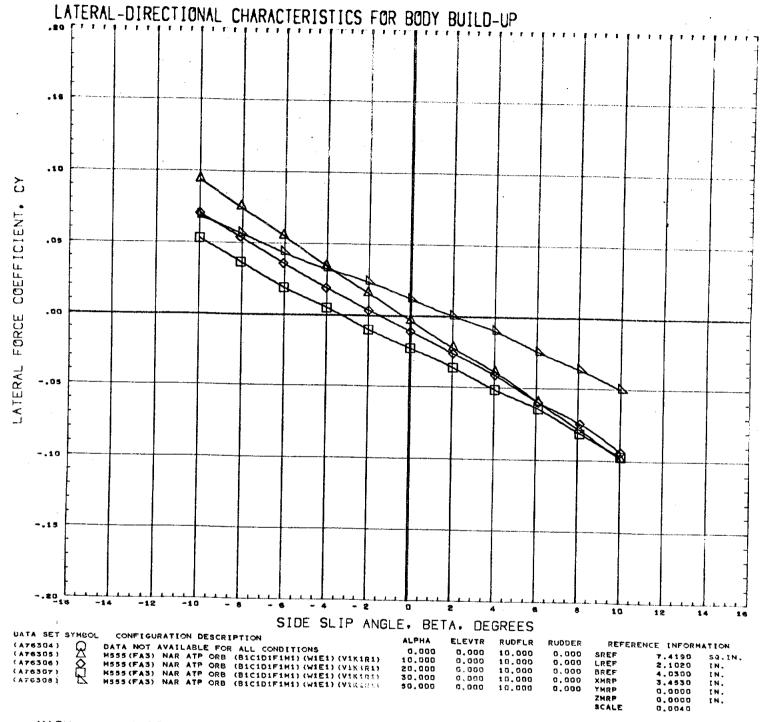




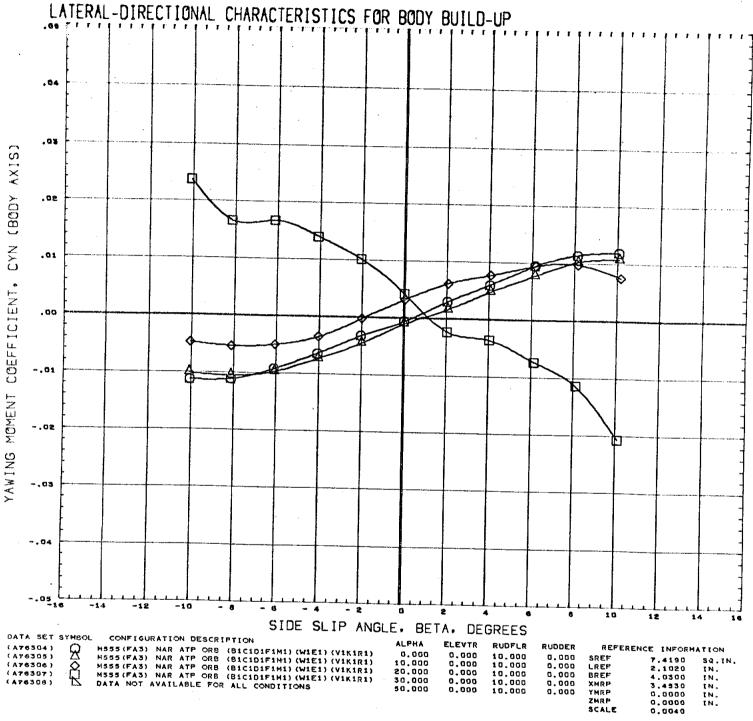




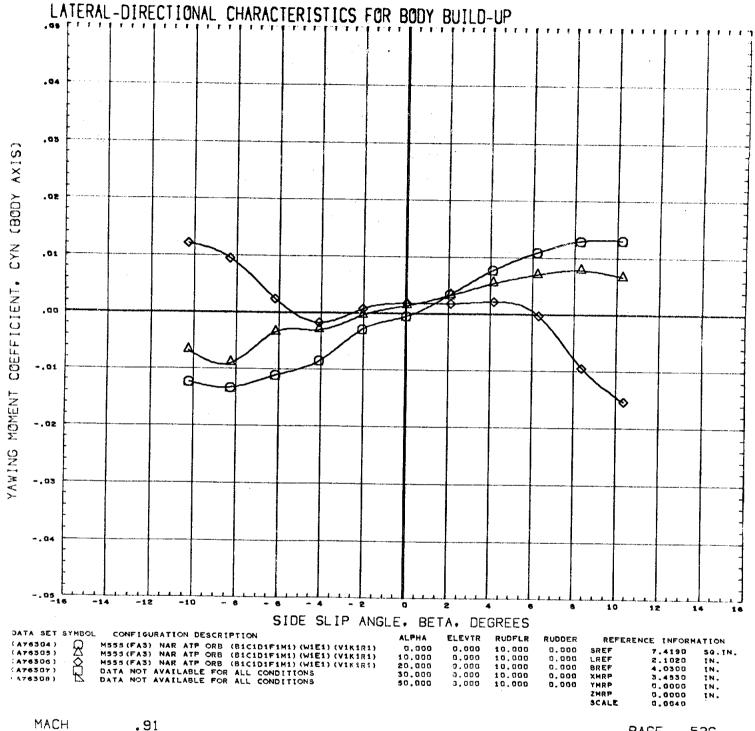
MACH 2.99

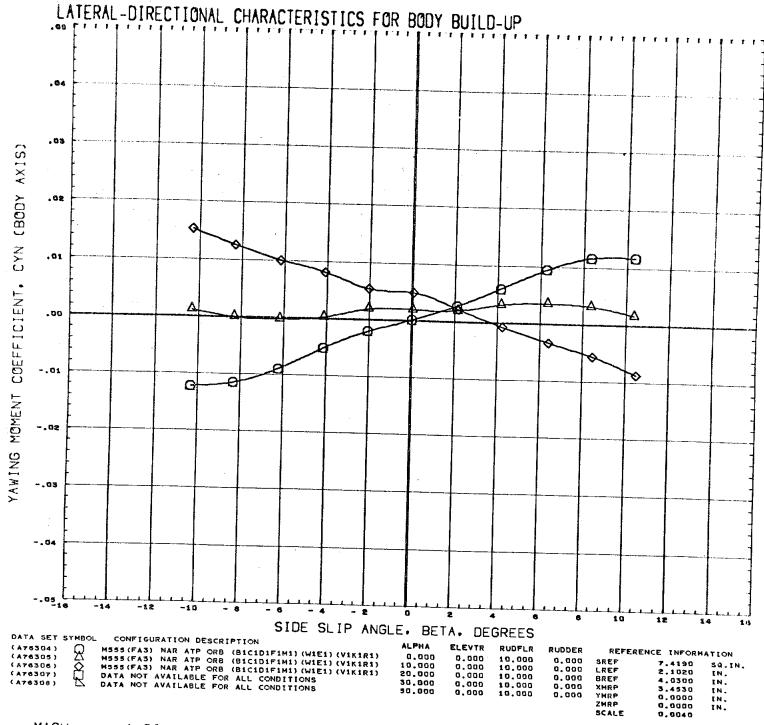


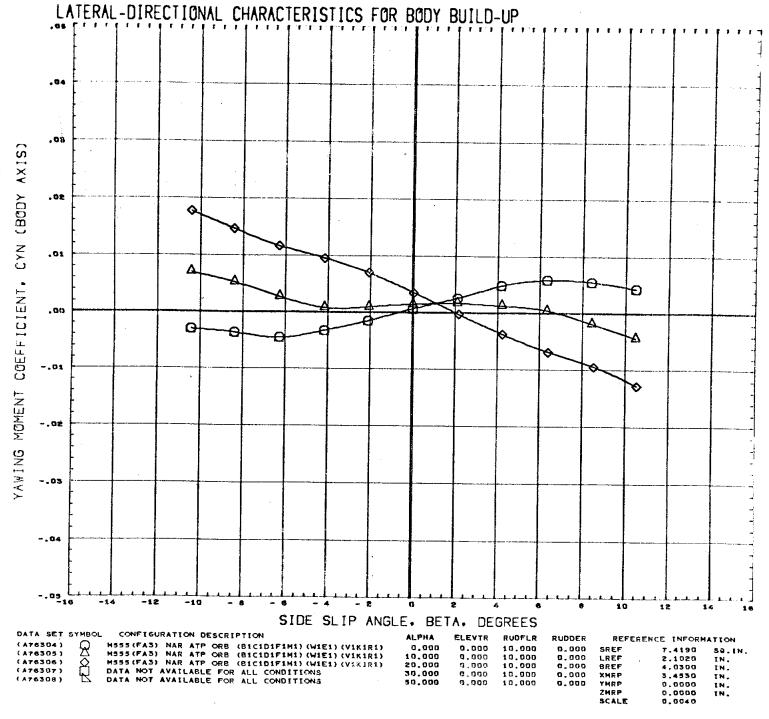
MACH 4.96

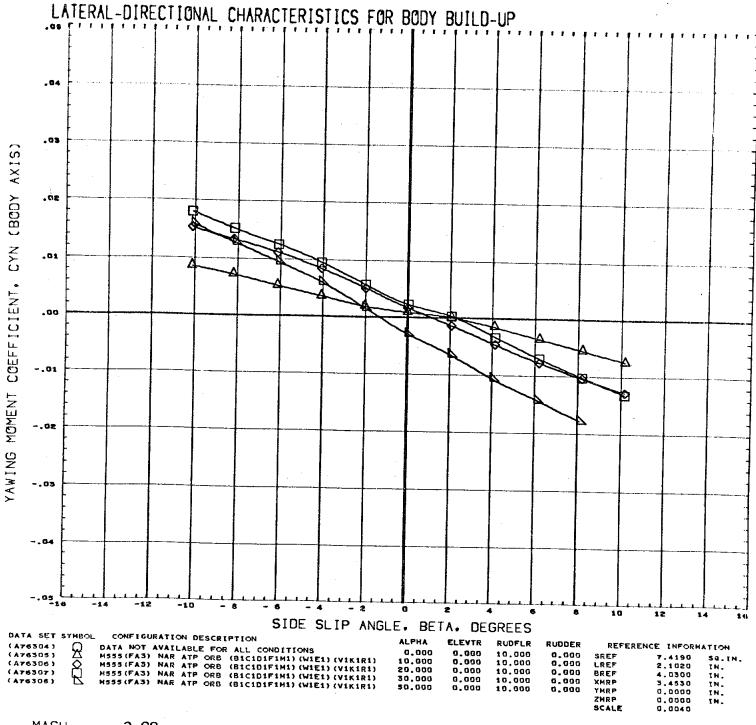


.60

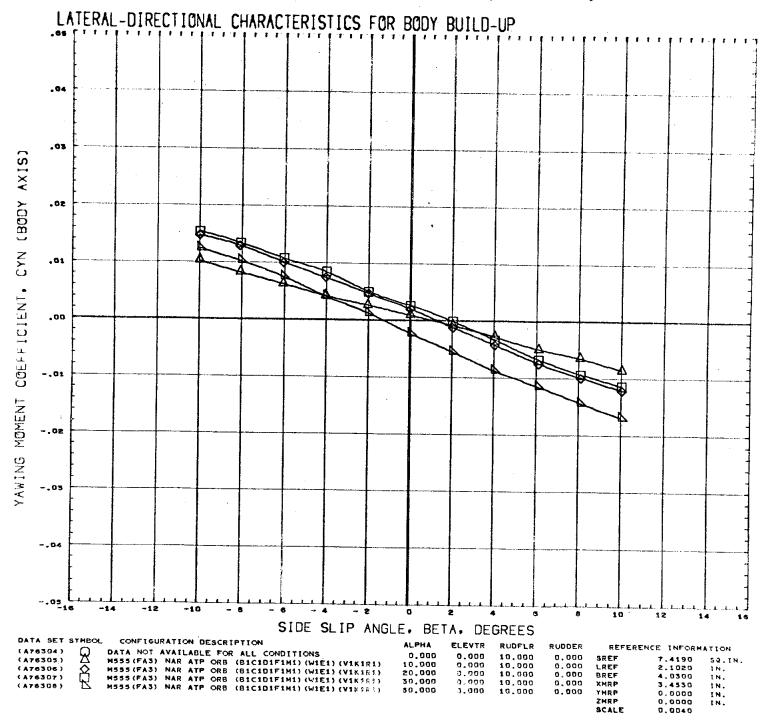




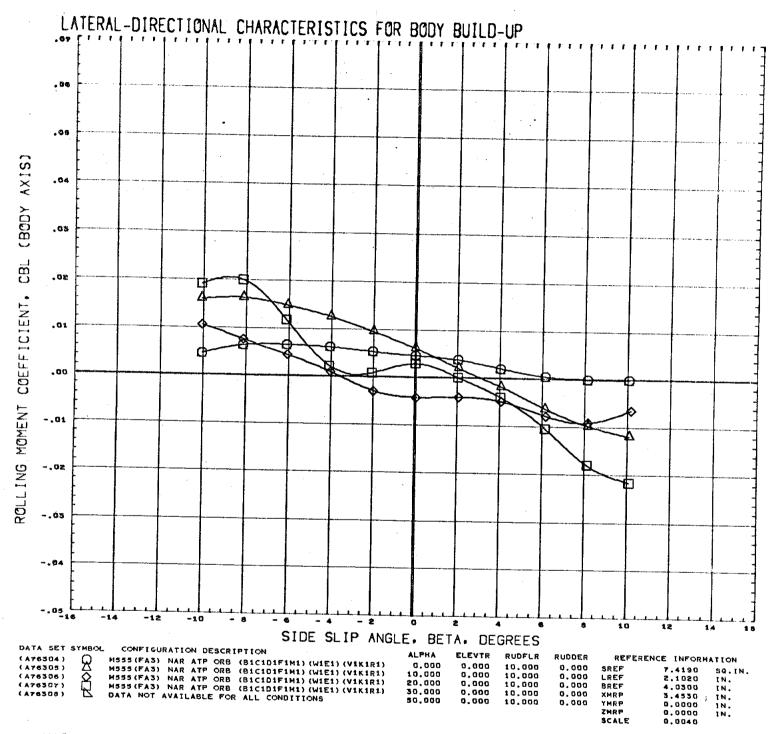




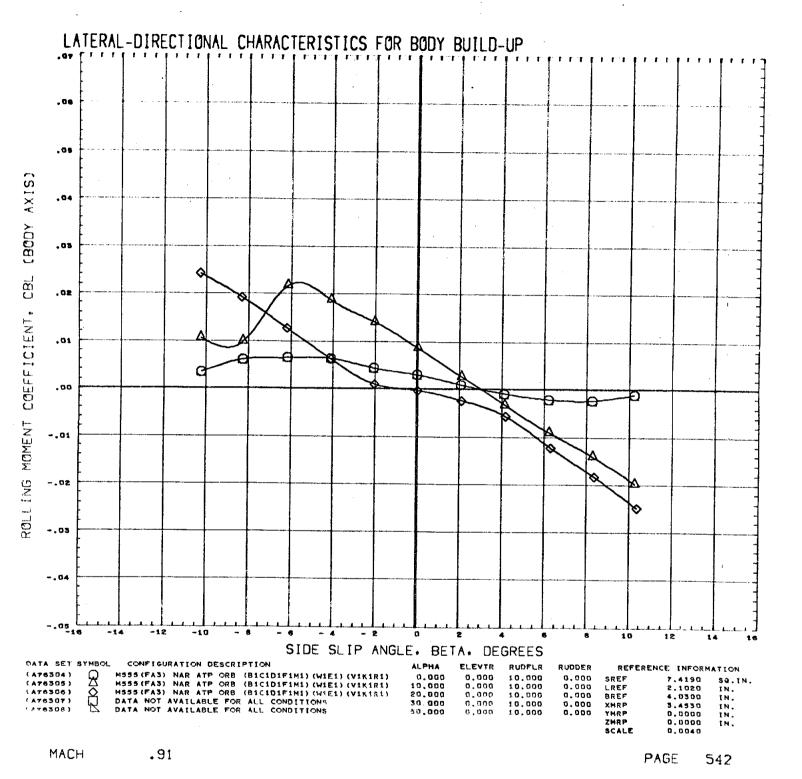
MACH 2.99

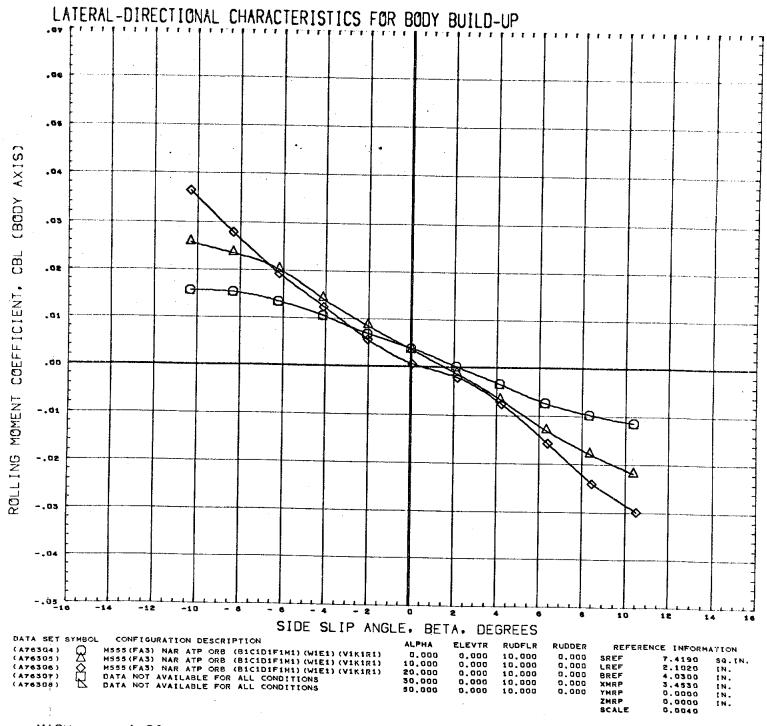


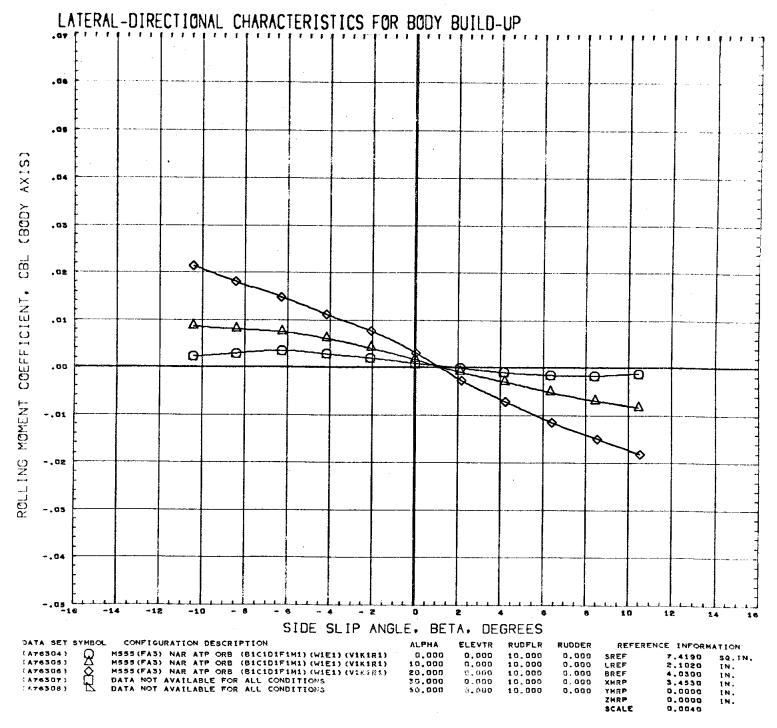
MACH 4.96

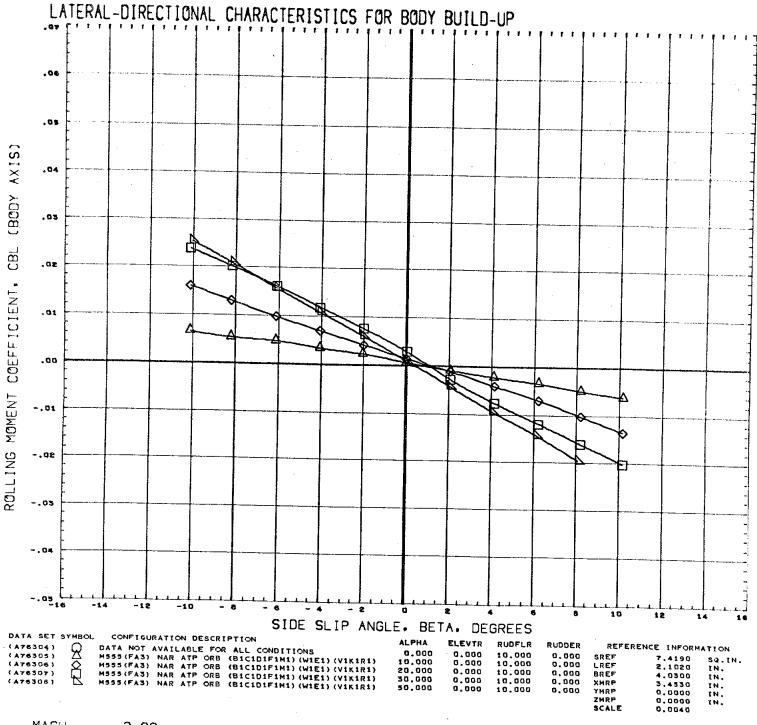


.60

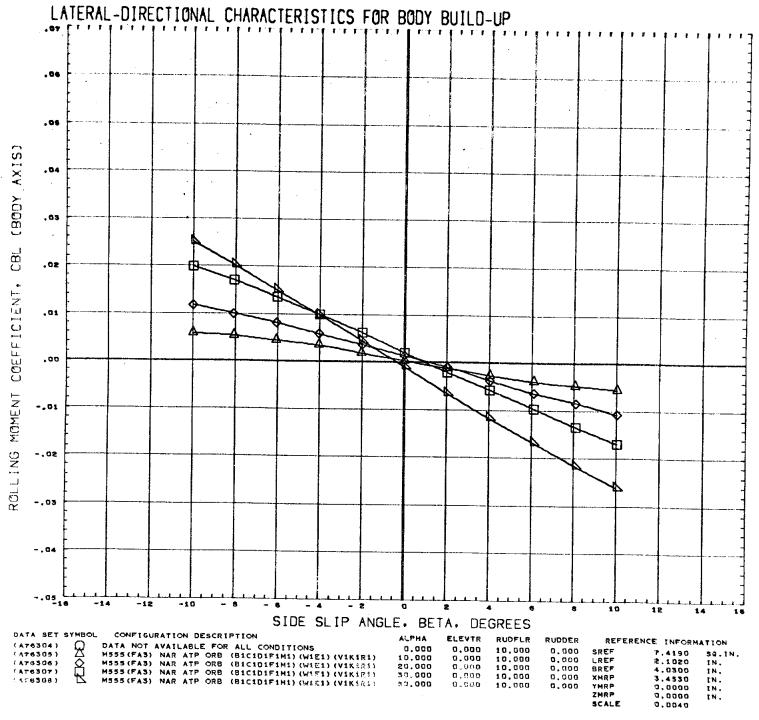




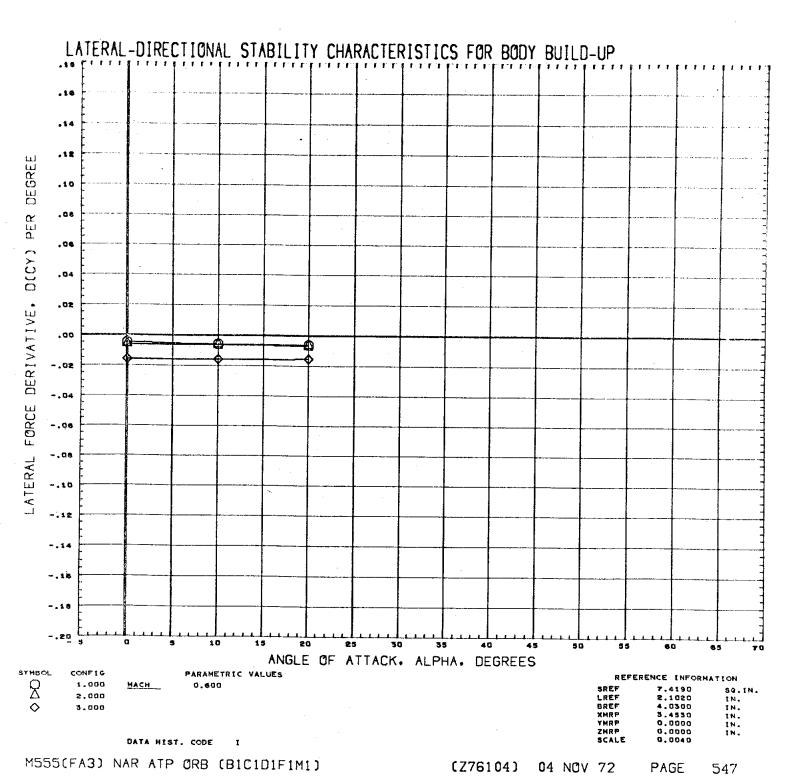


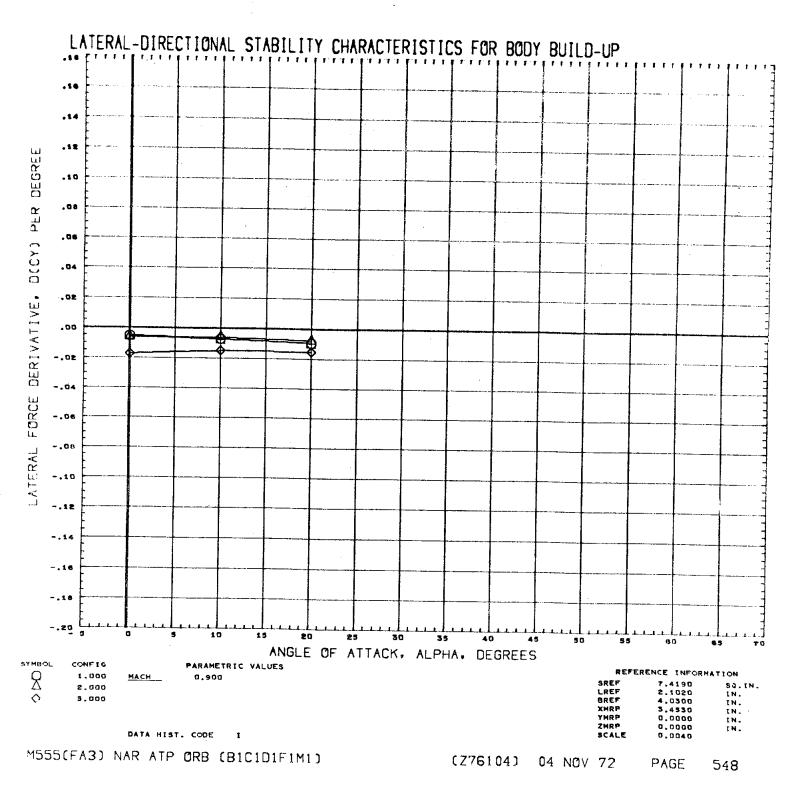


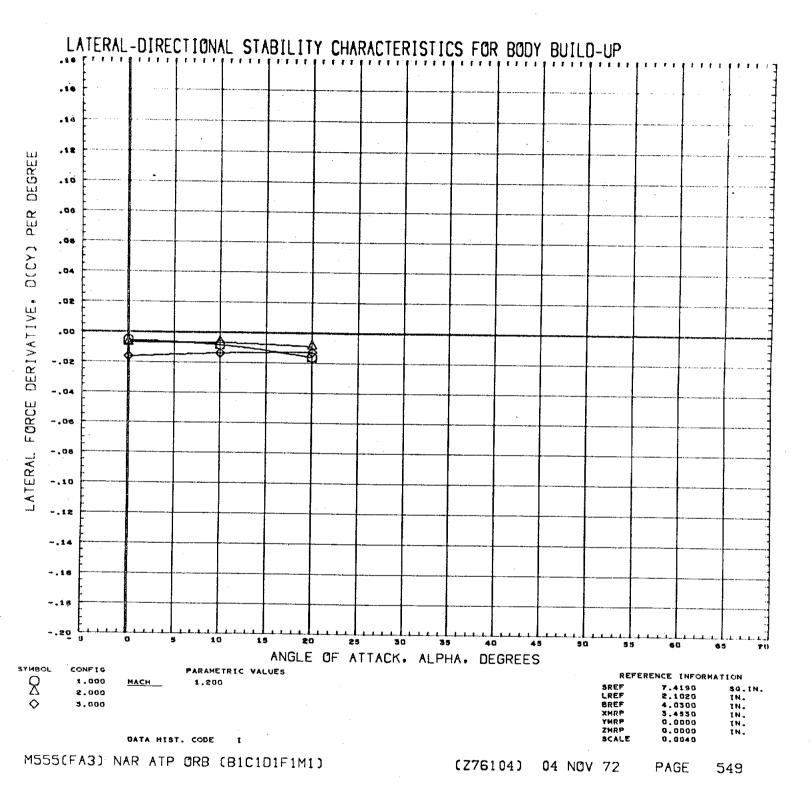
MACH 2.99

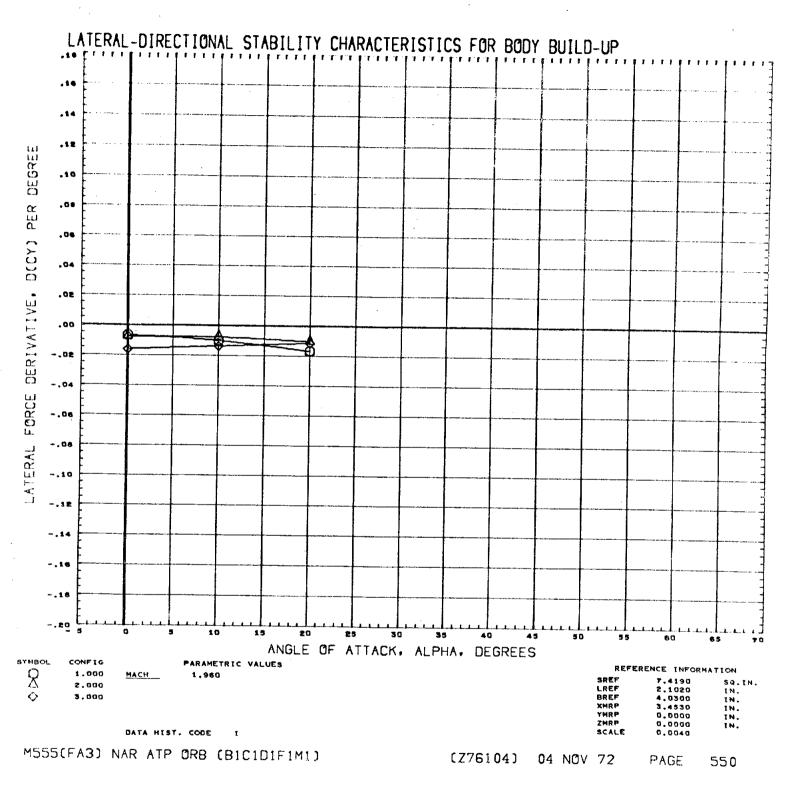


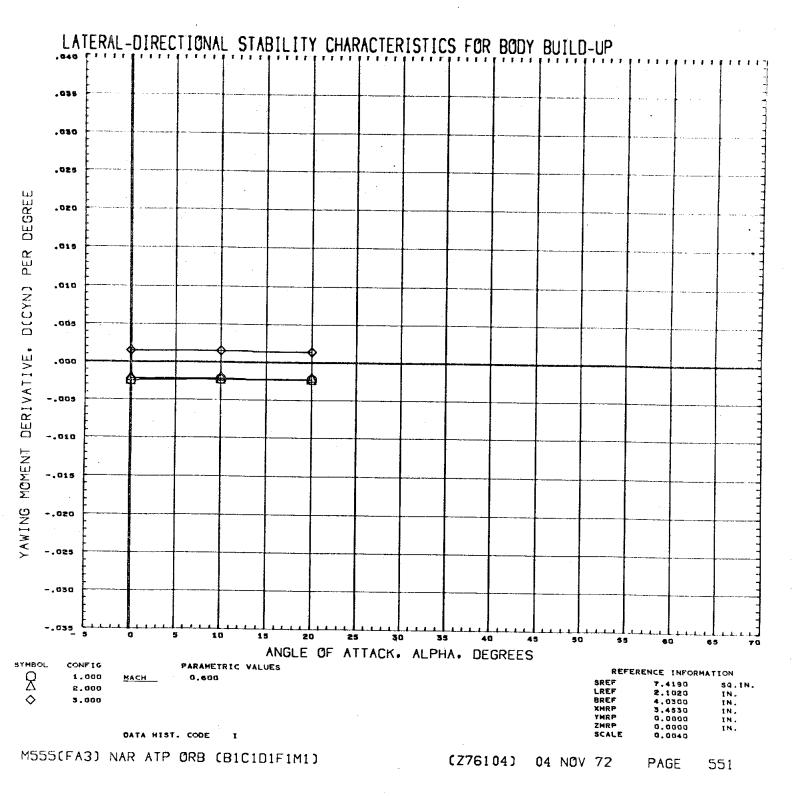
MACH 4.96

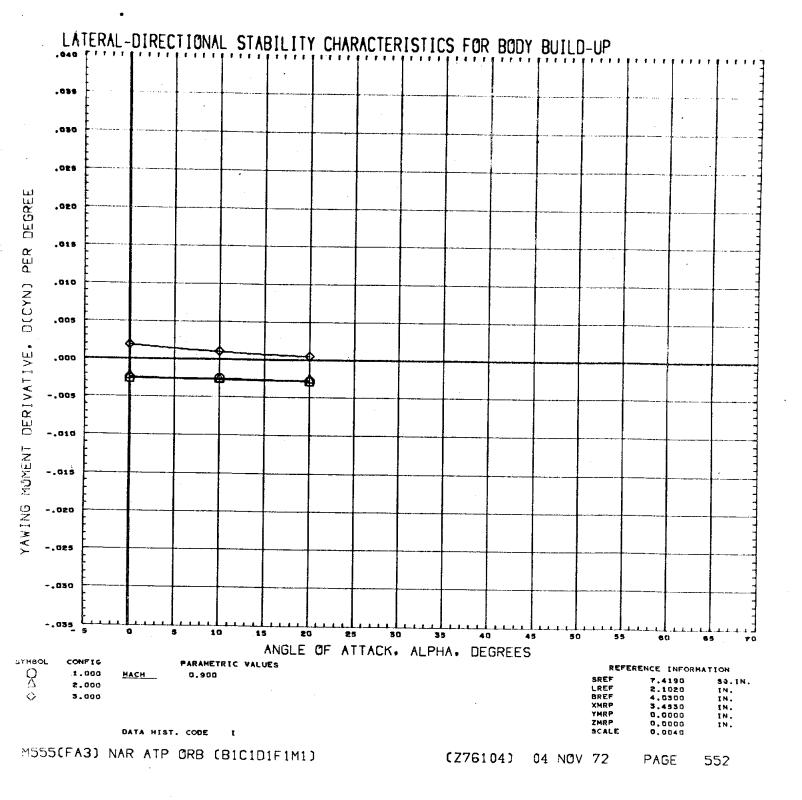


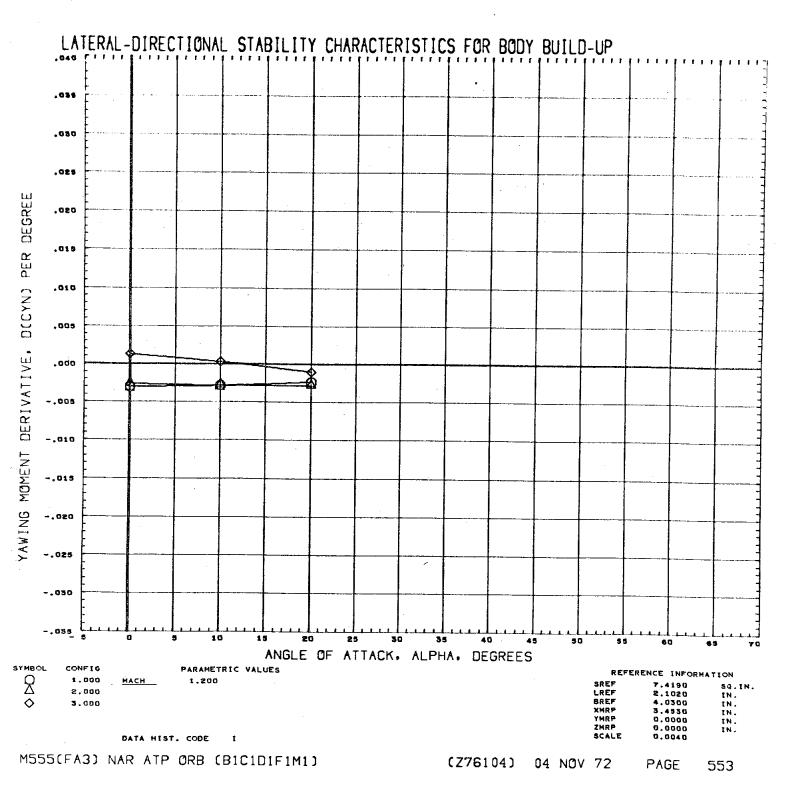


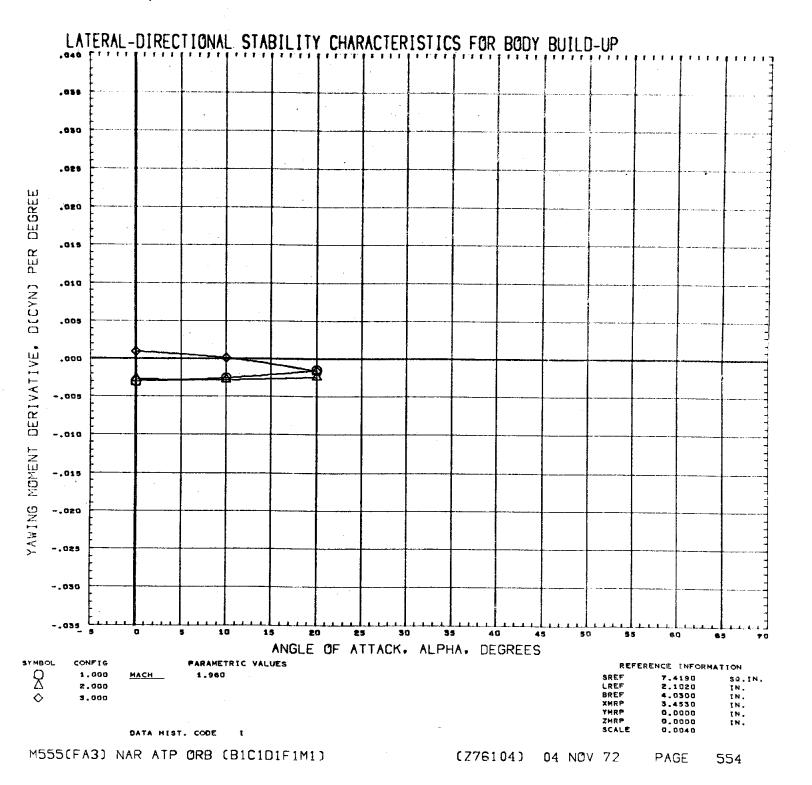


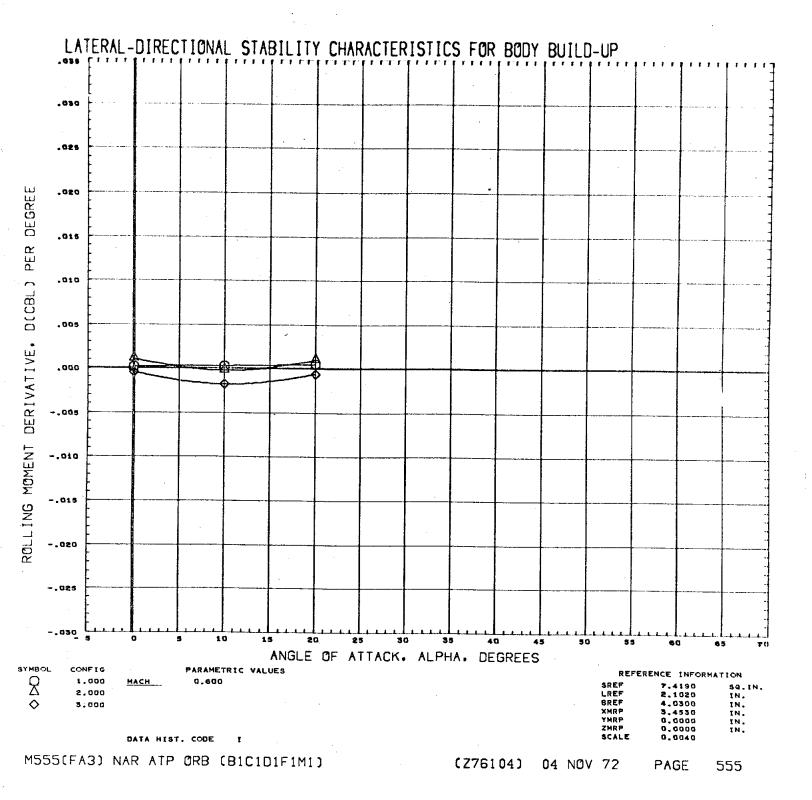


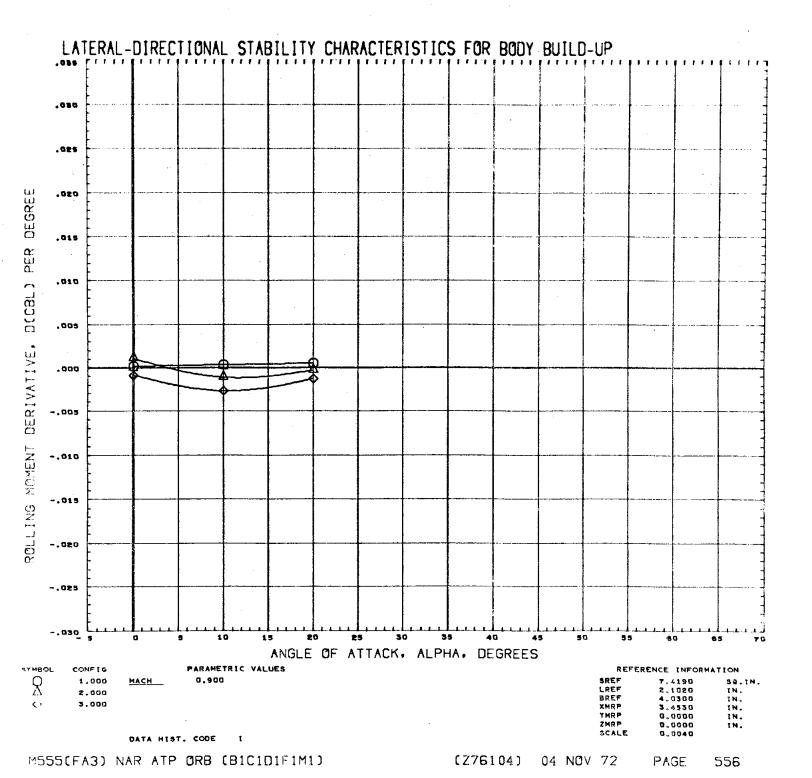


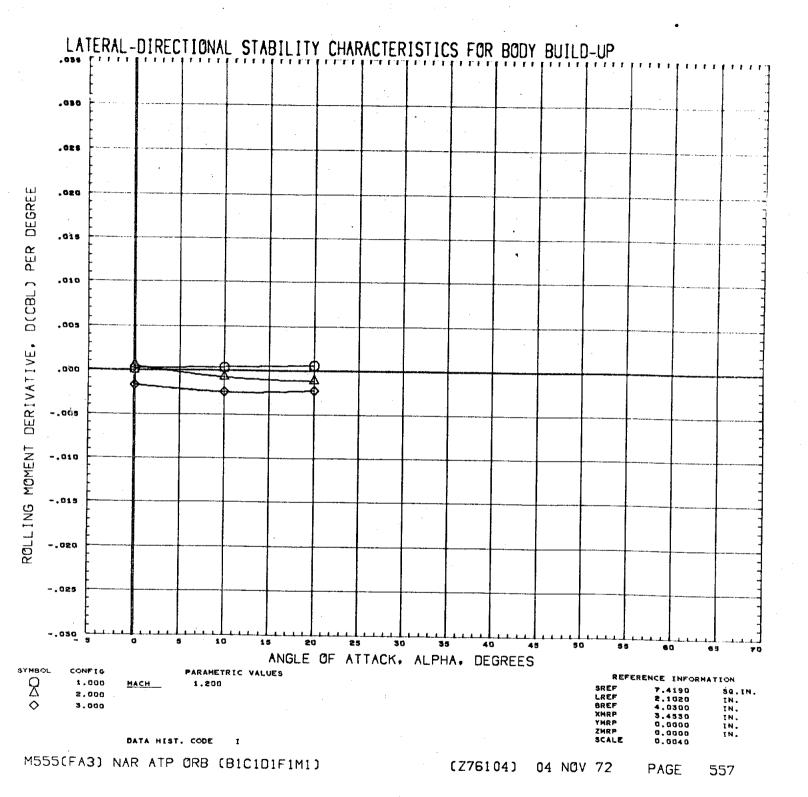


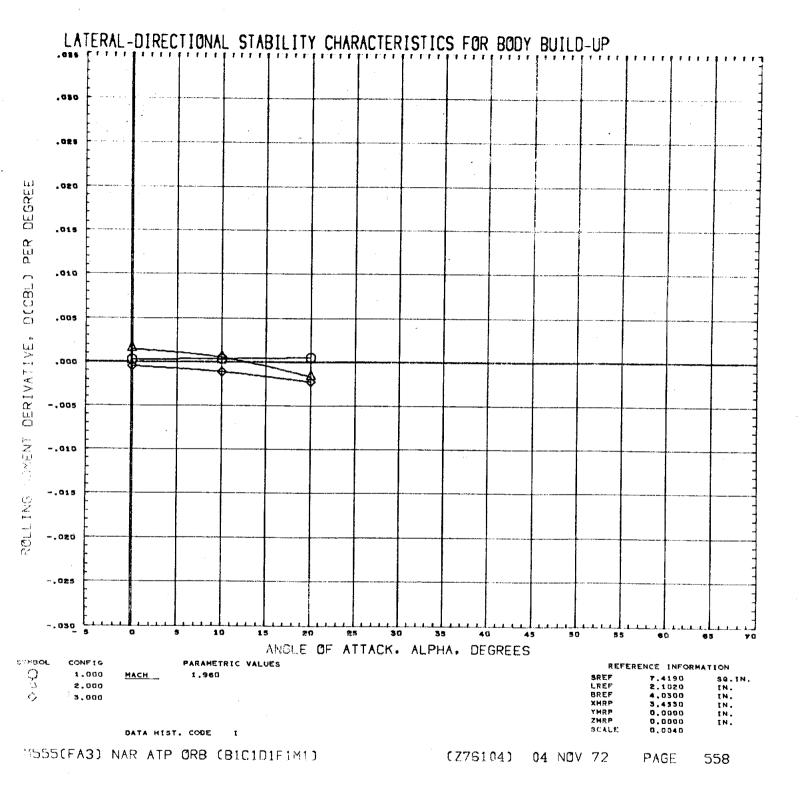


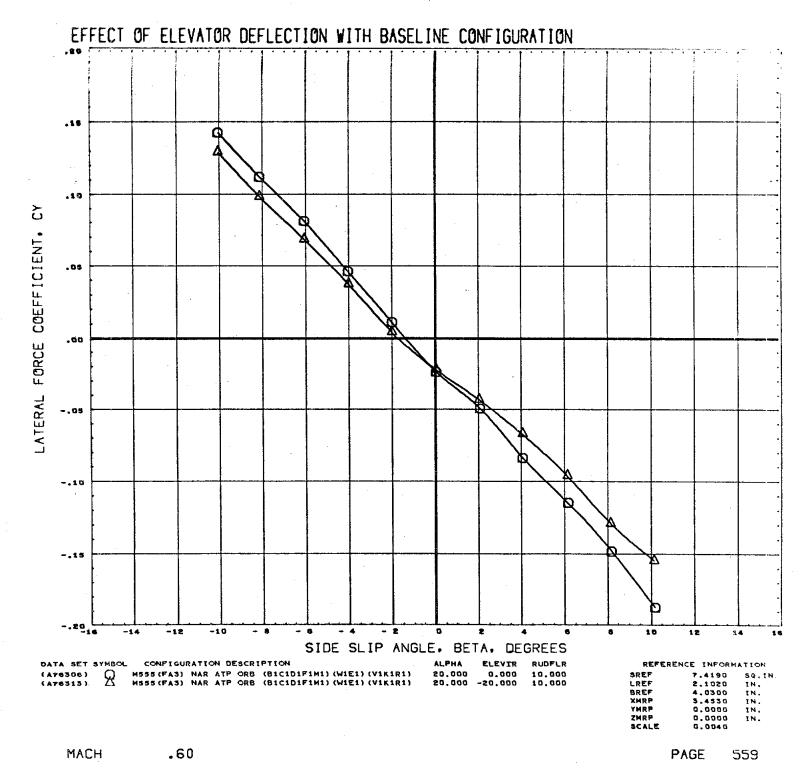


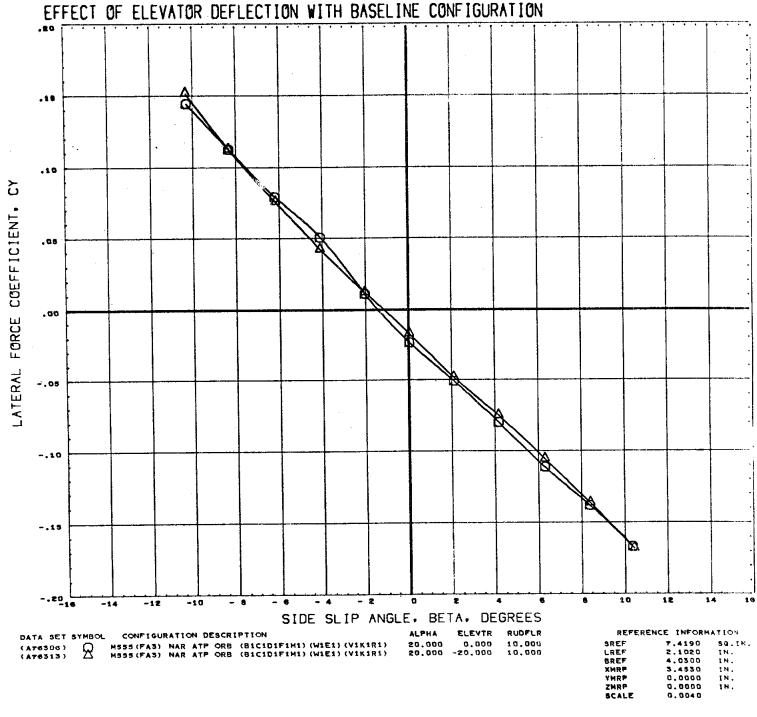






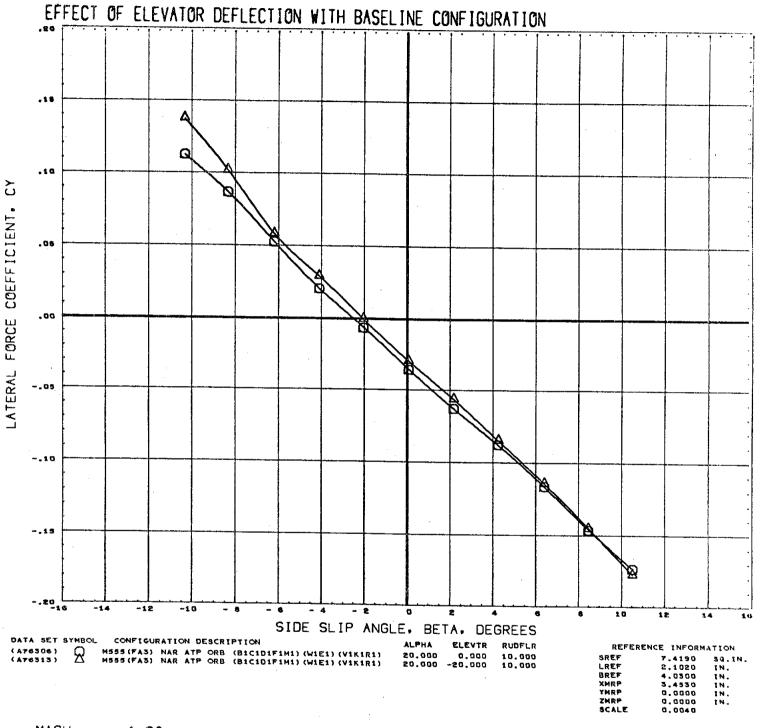






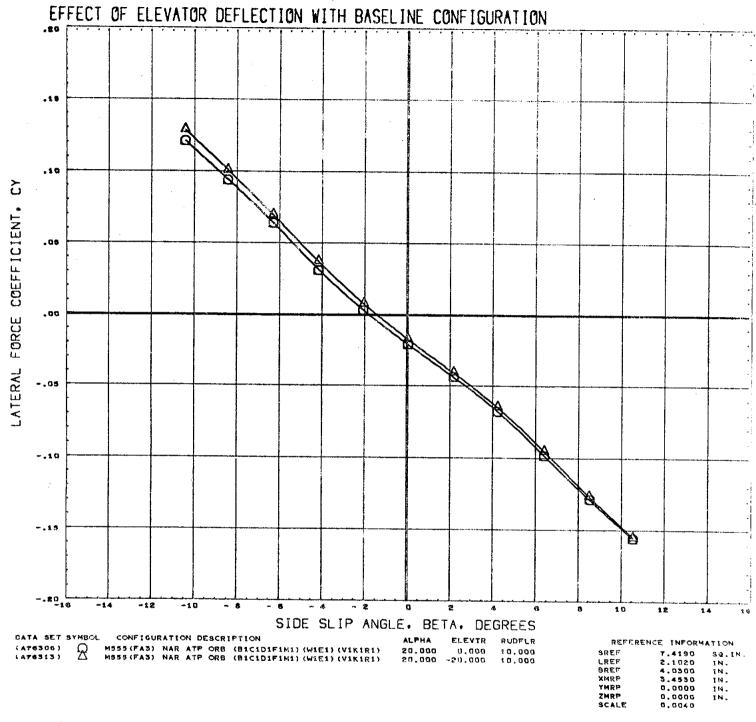
.90

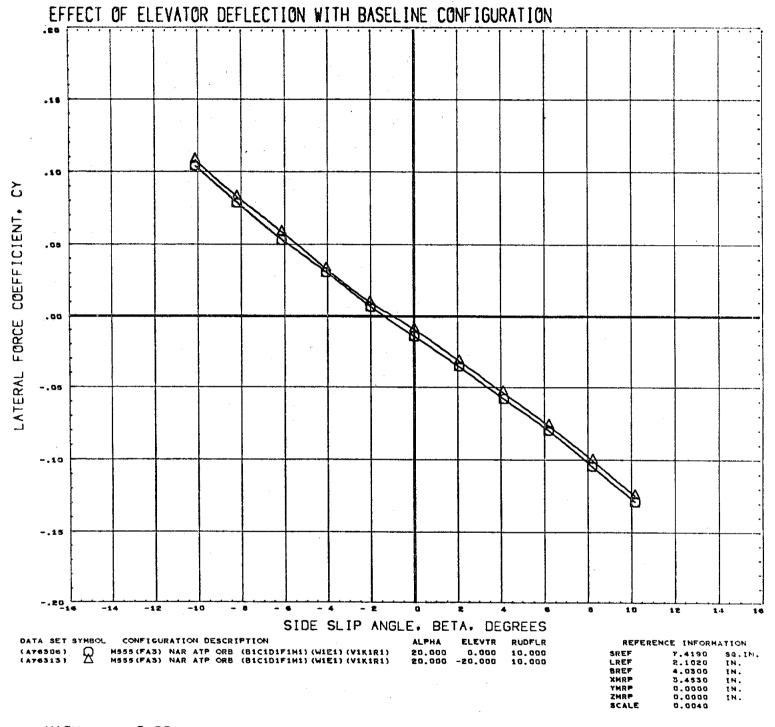
MACH



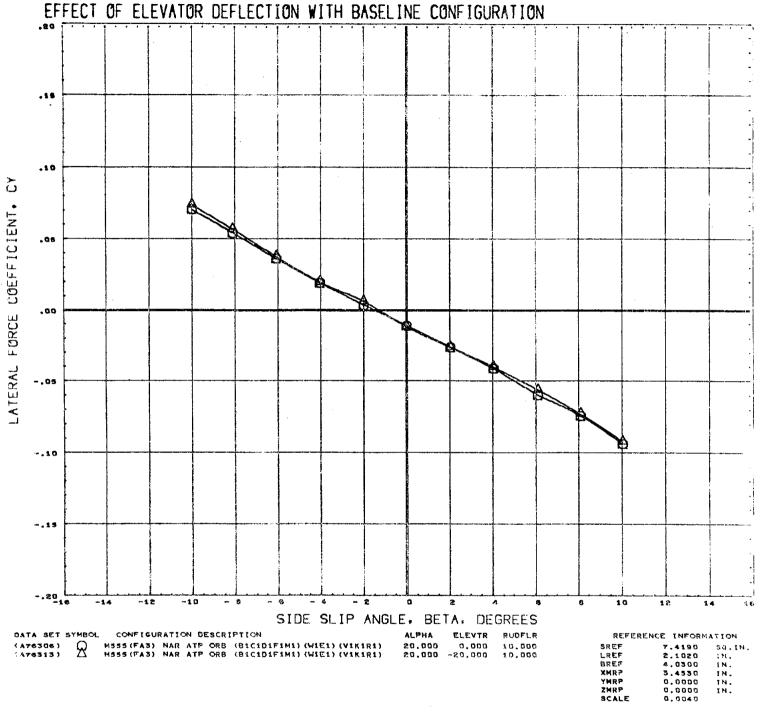
MACH

1.20

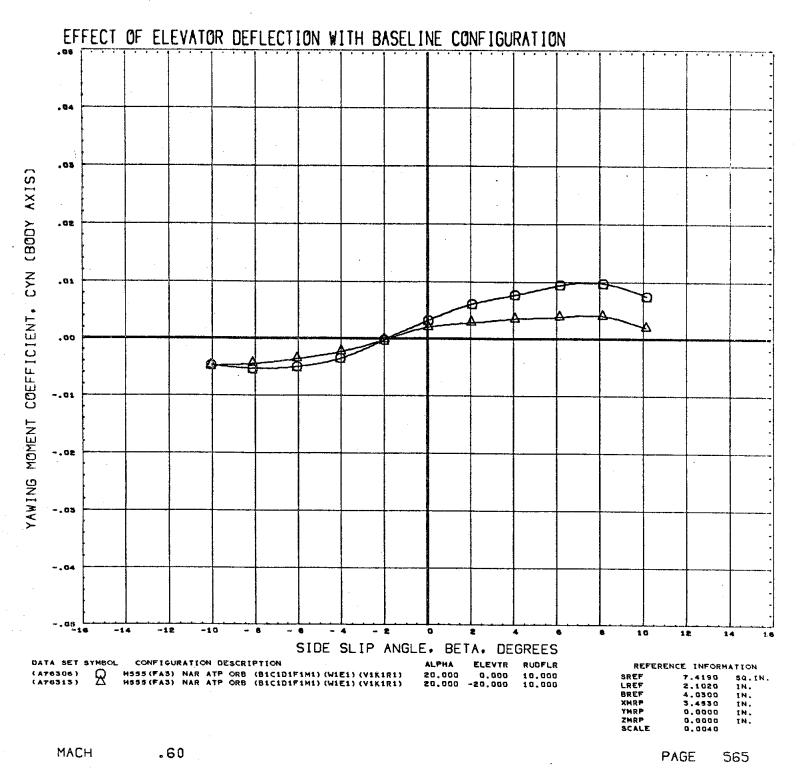


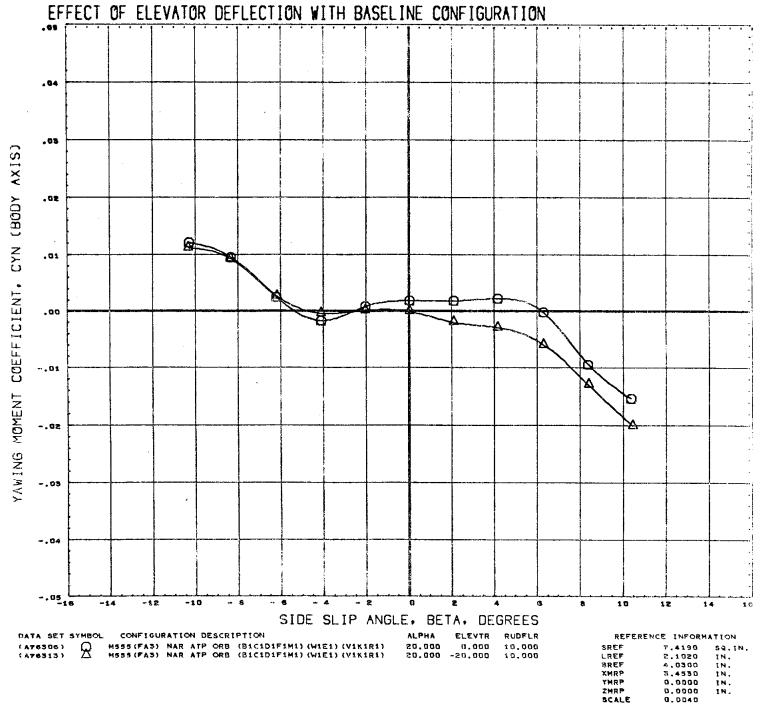


MACH 2.99

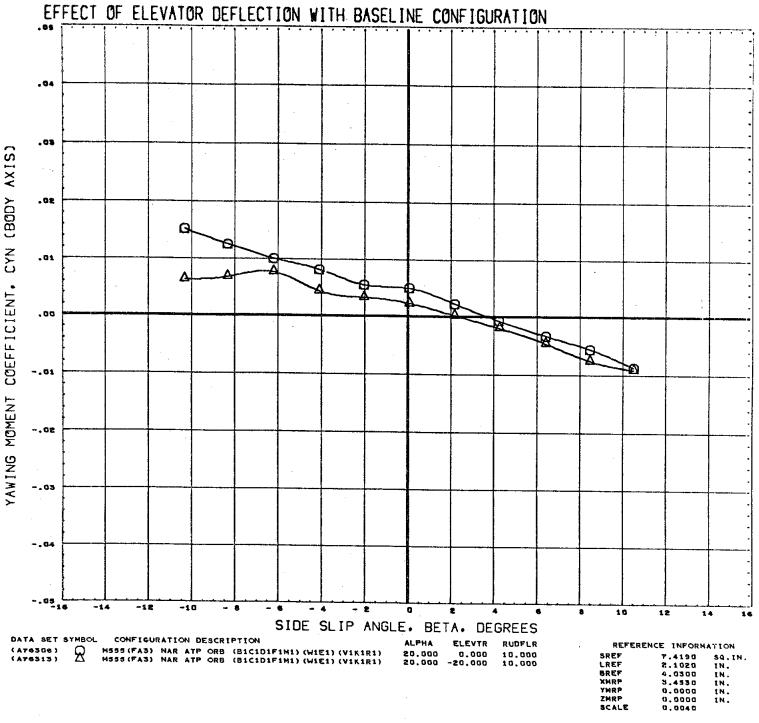


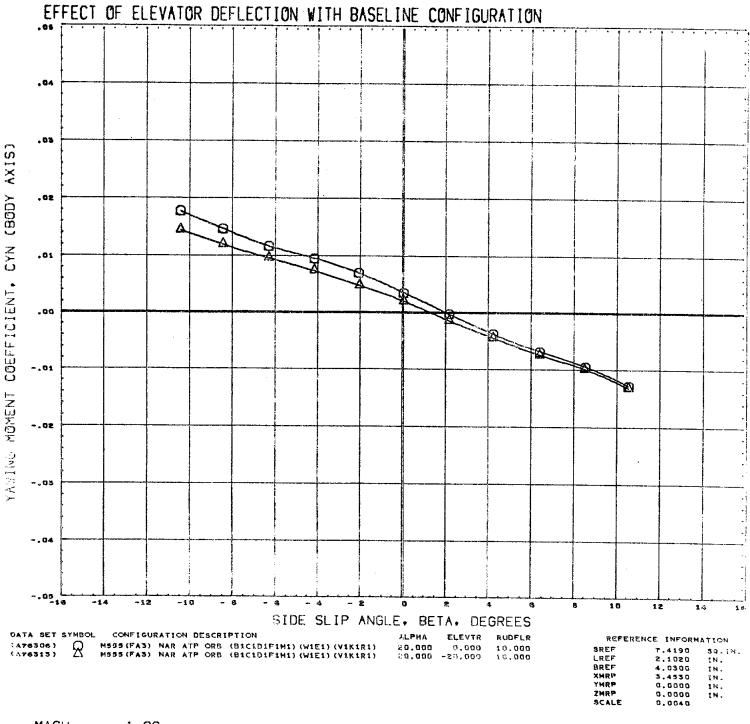
MACH 4.96

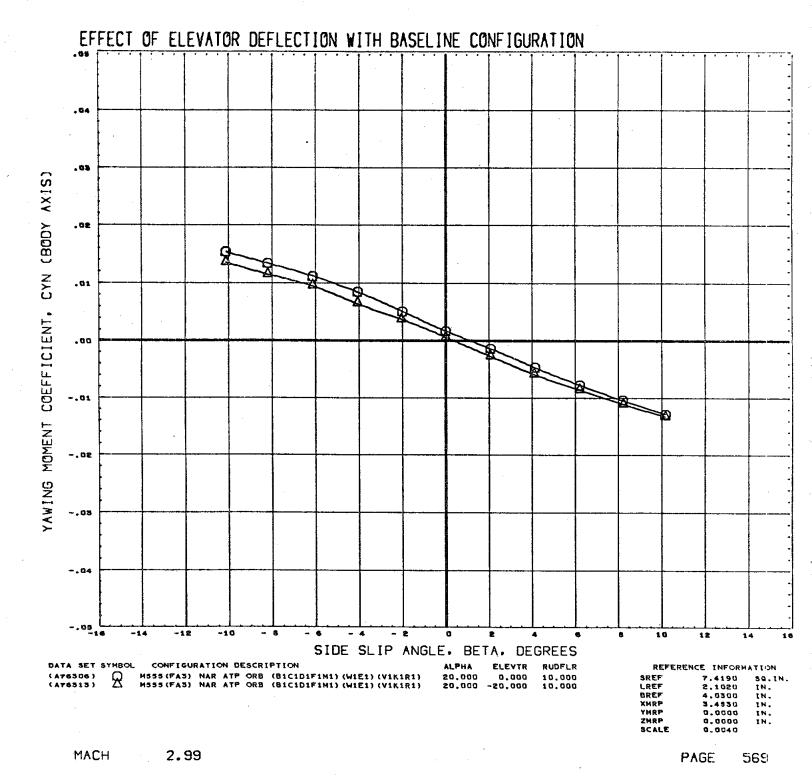


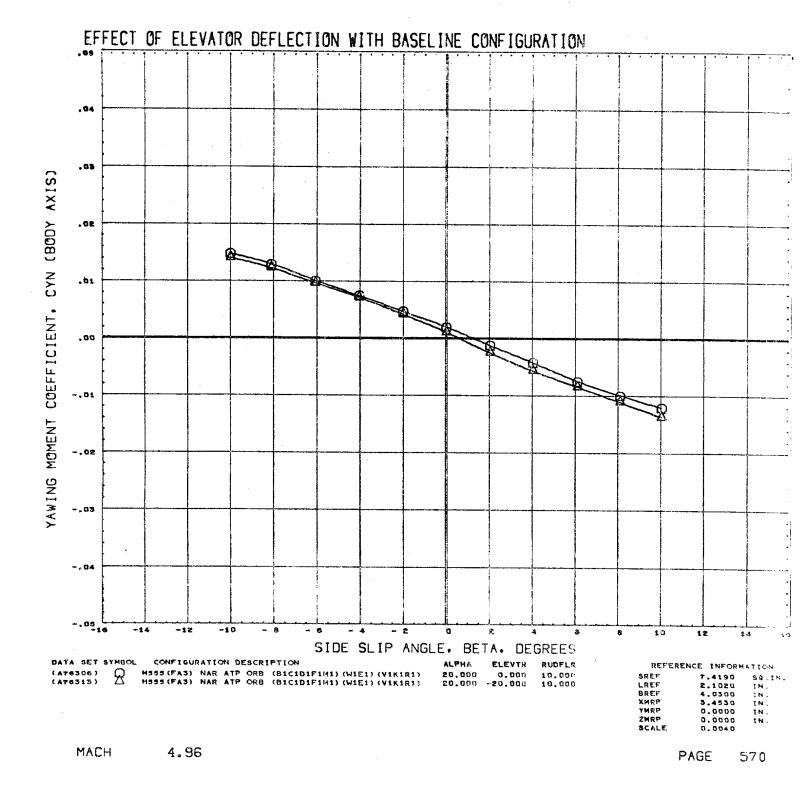


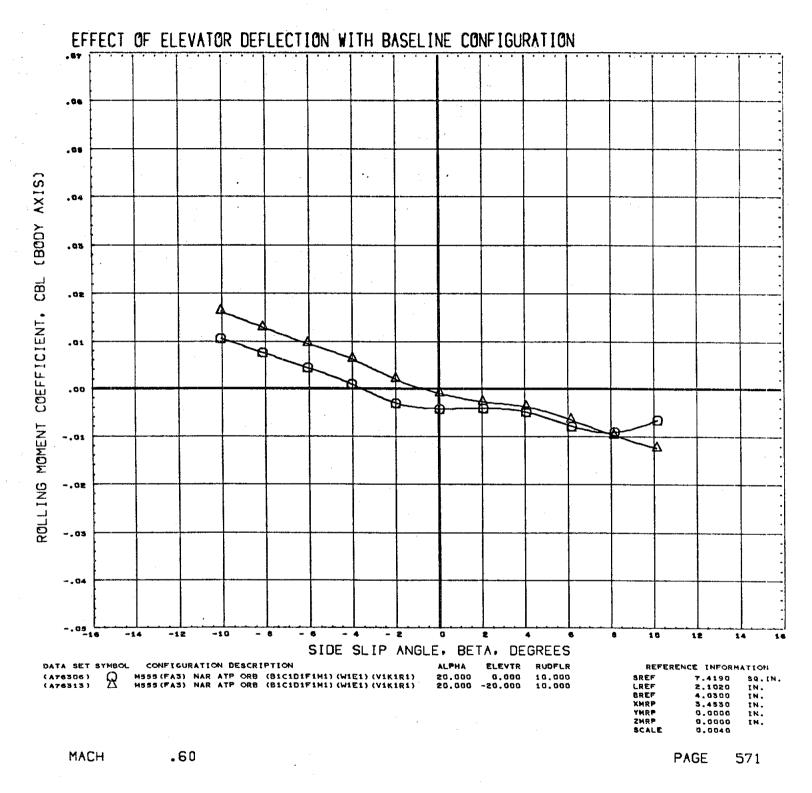
MACH 90

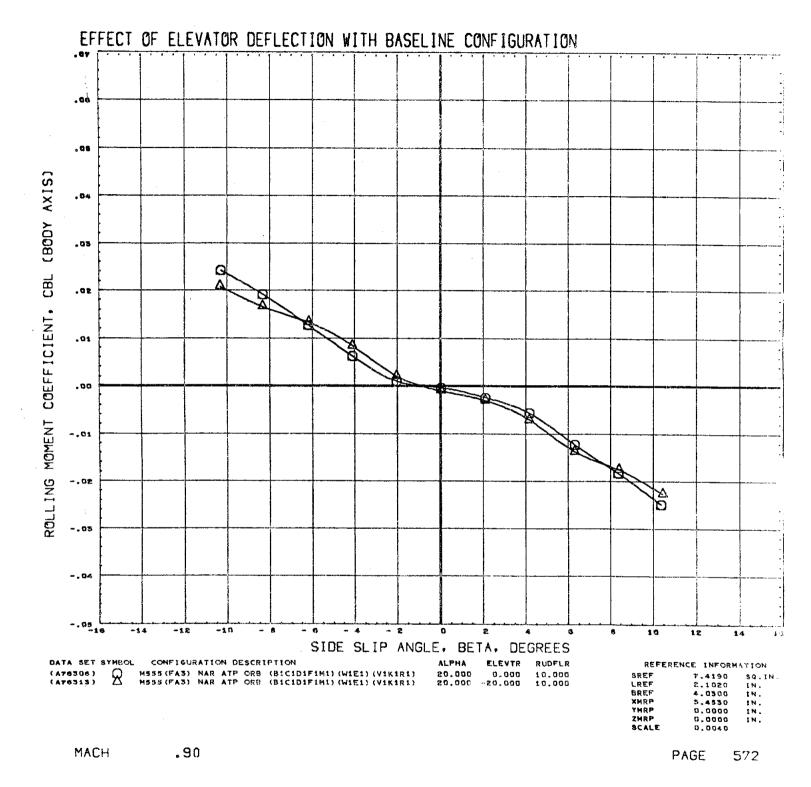


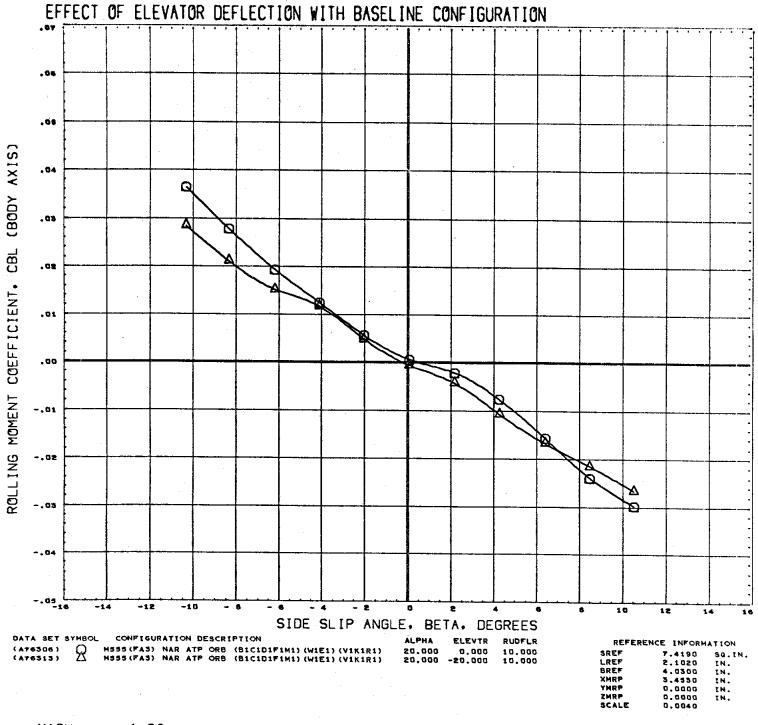


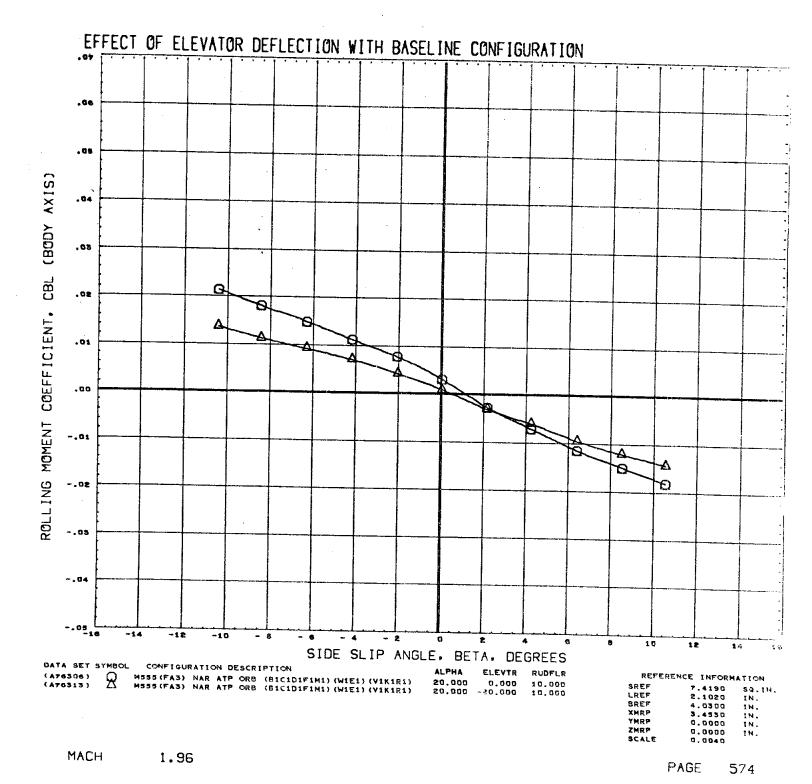


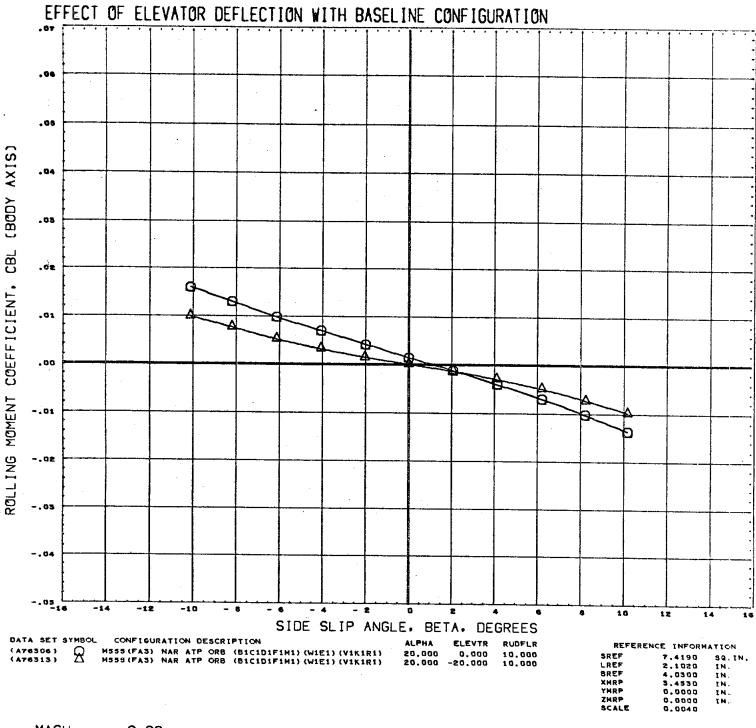




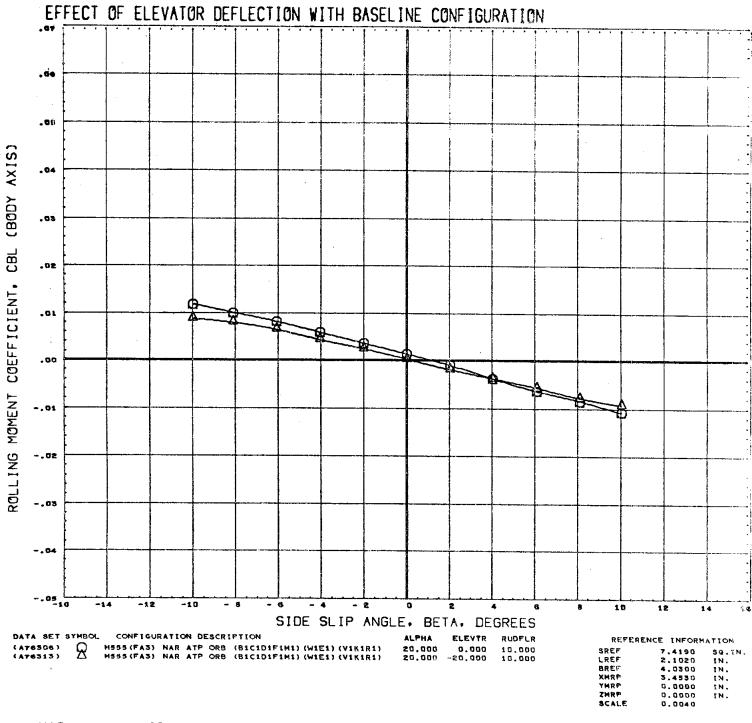




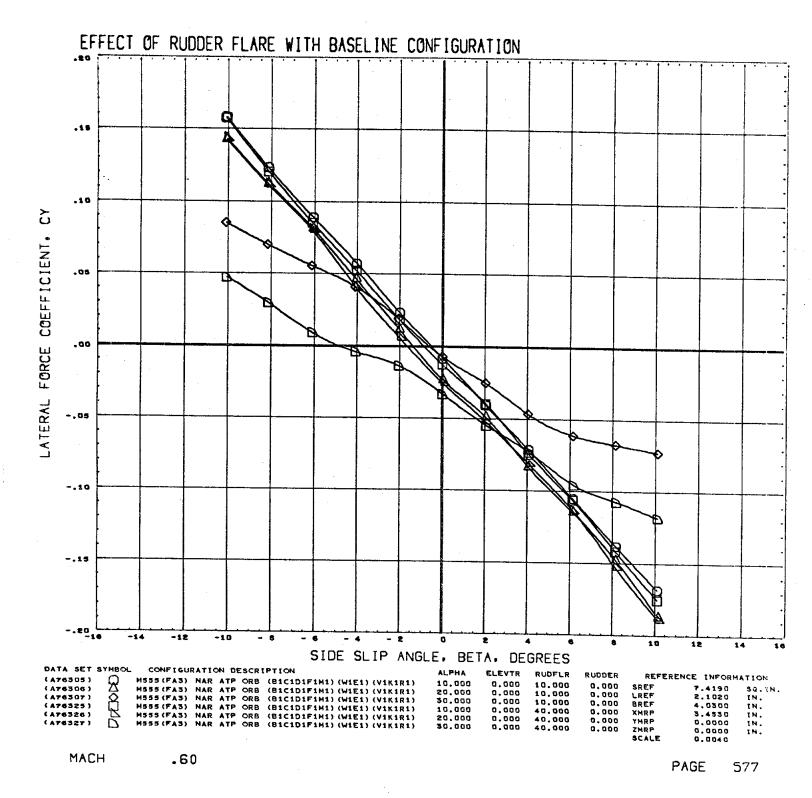


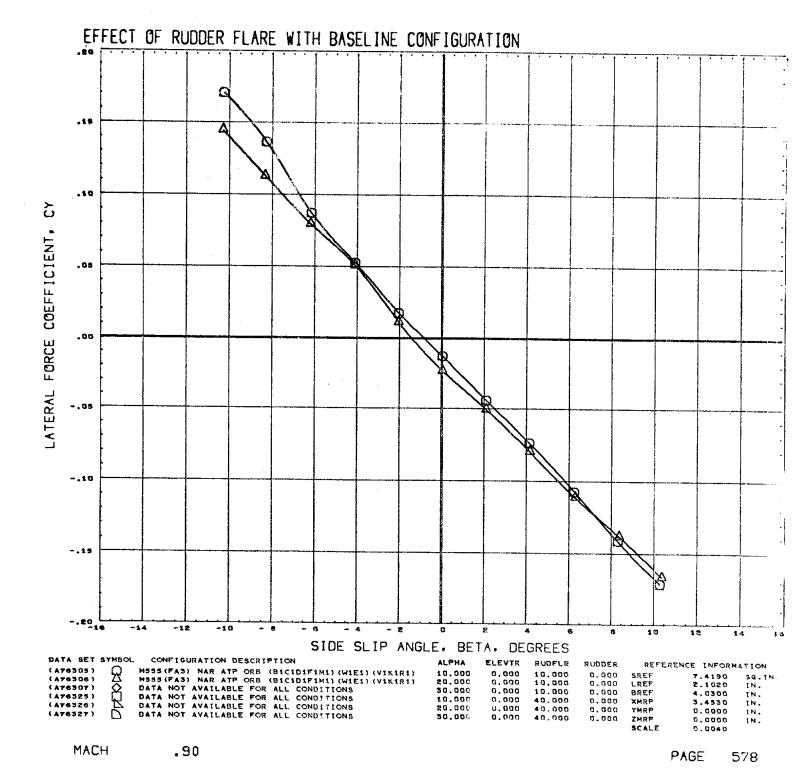


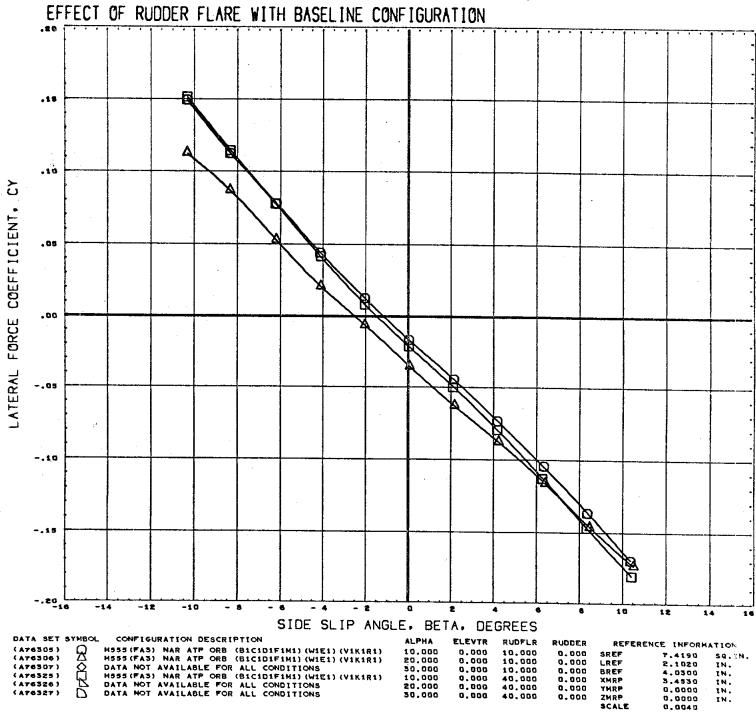
MACH 2.99

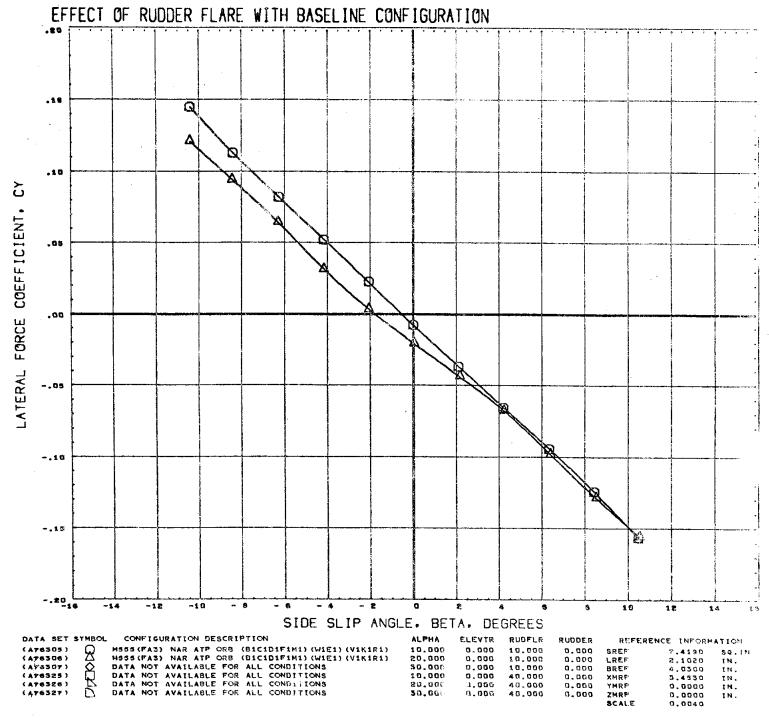


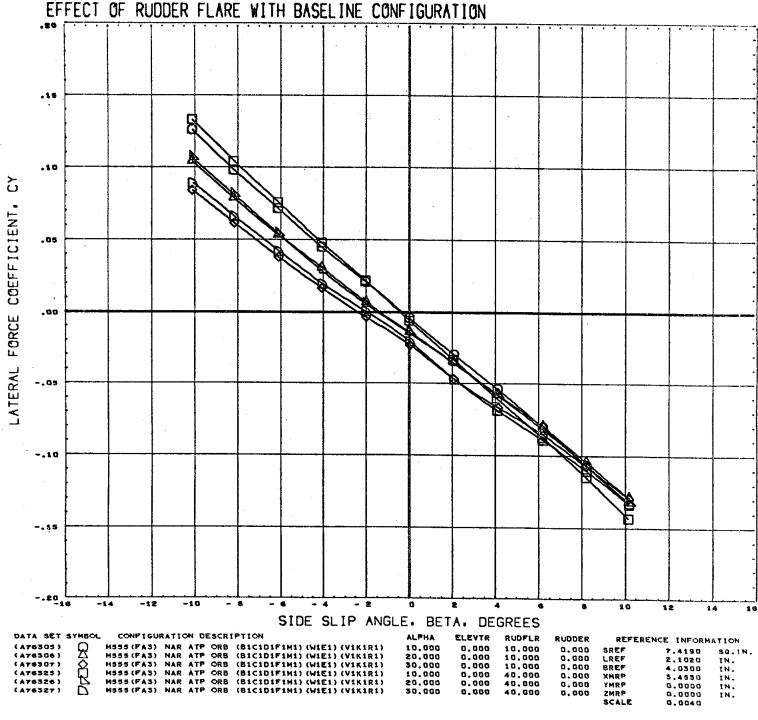
MACH 4.96



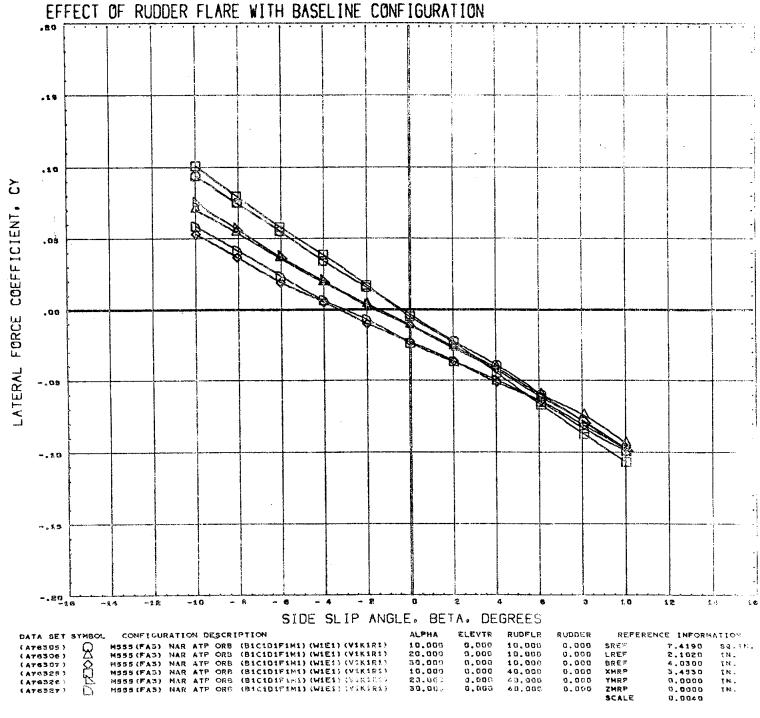






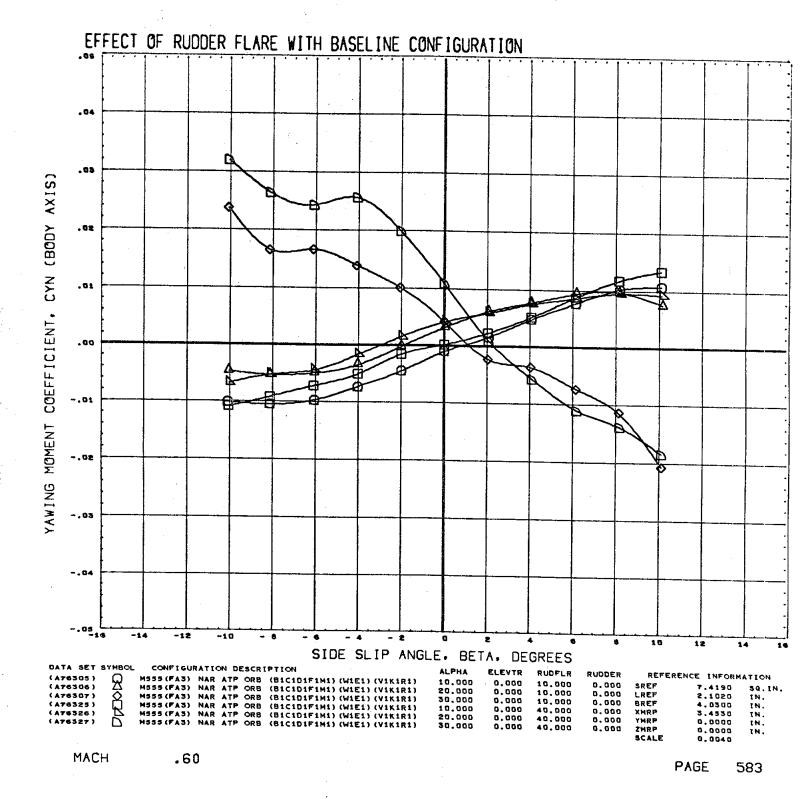


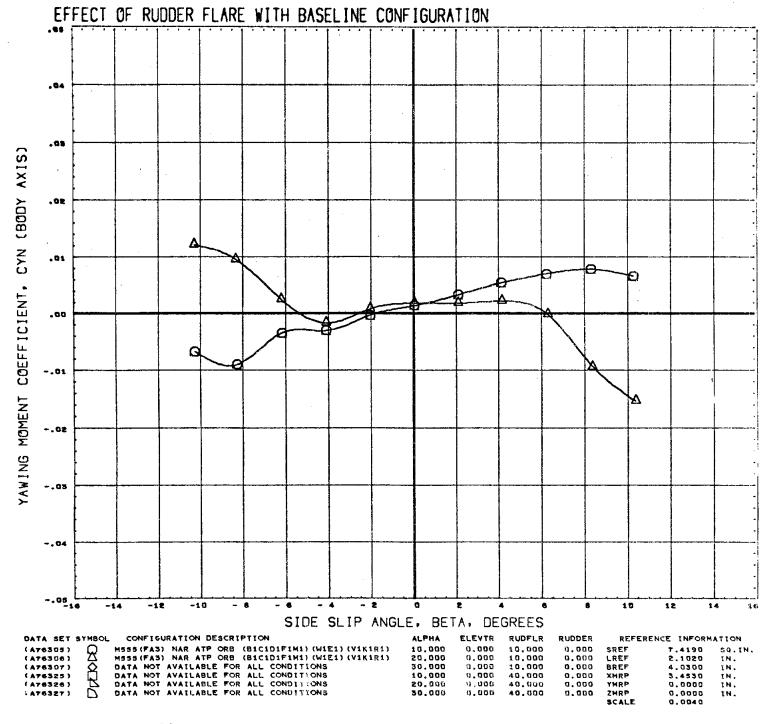
MACH 2.99

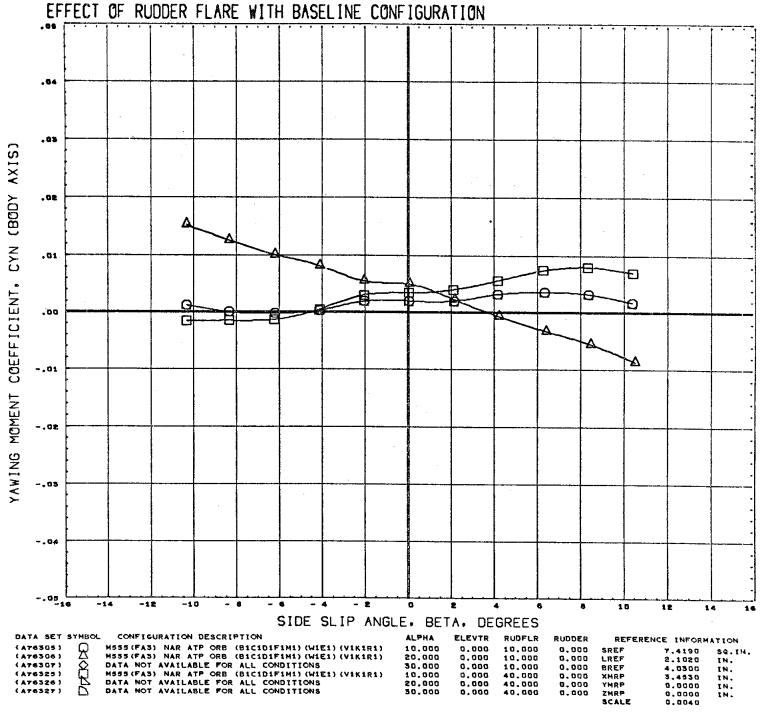


4.96

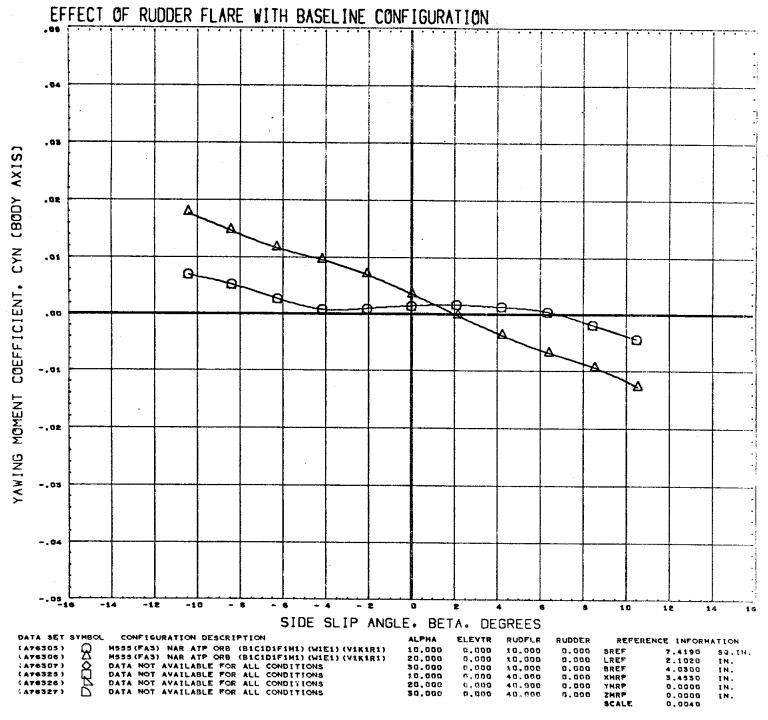
MACH





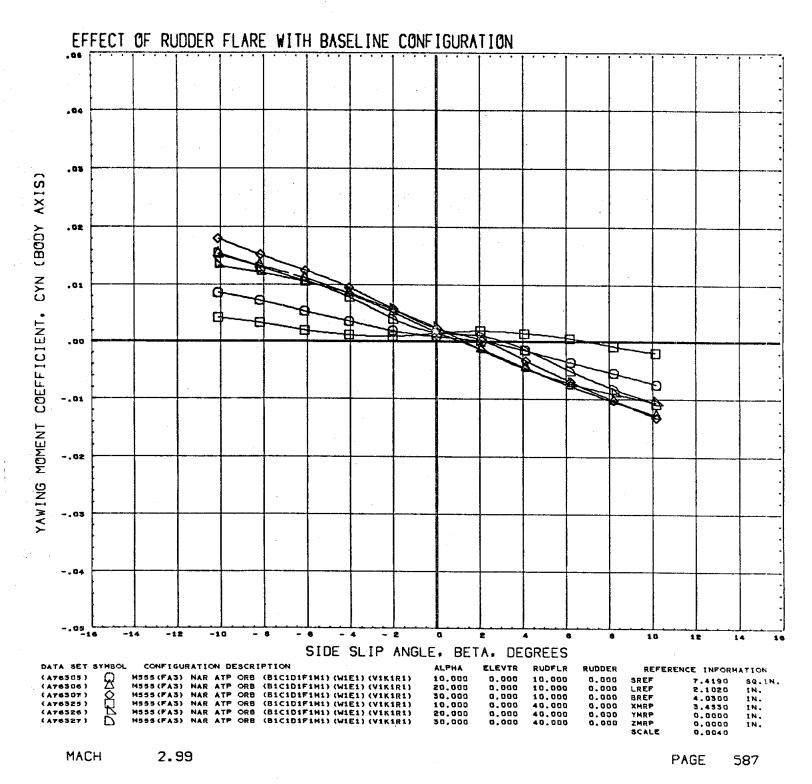


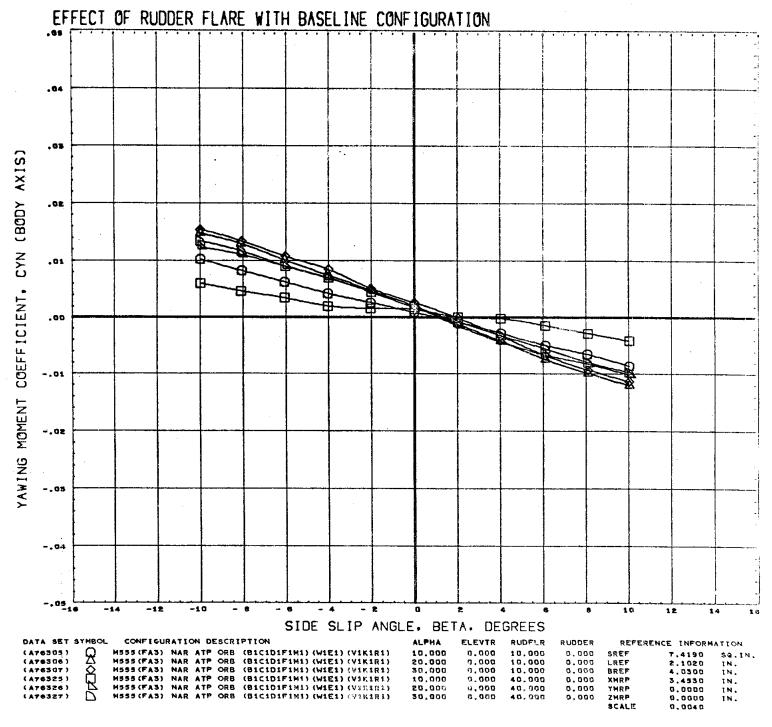
PAGE



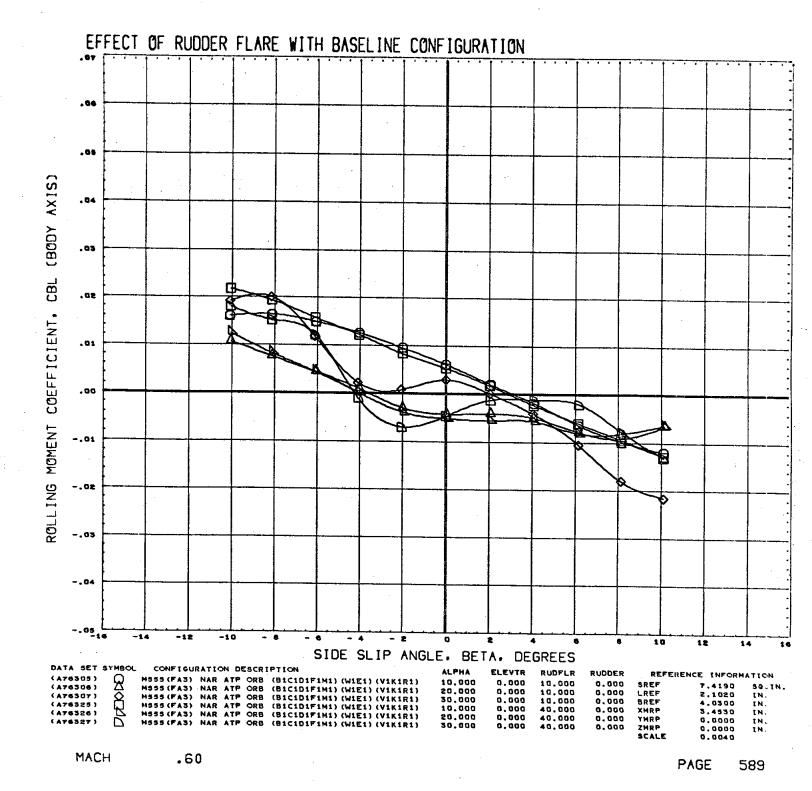
1.96

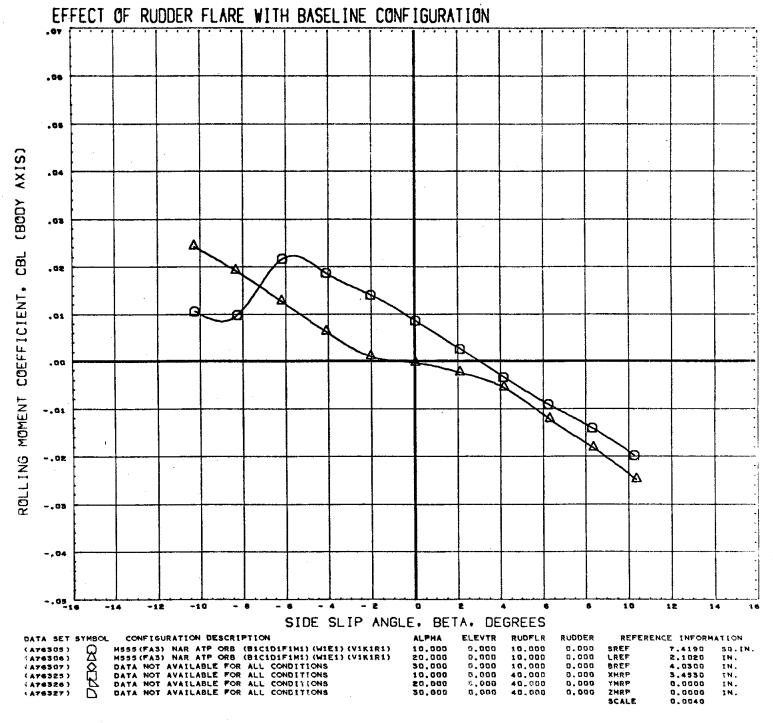
PAGE





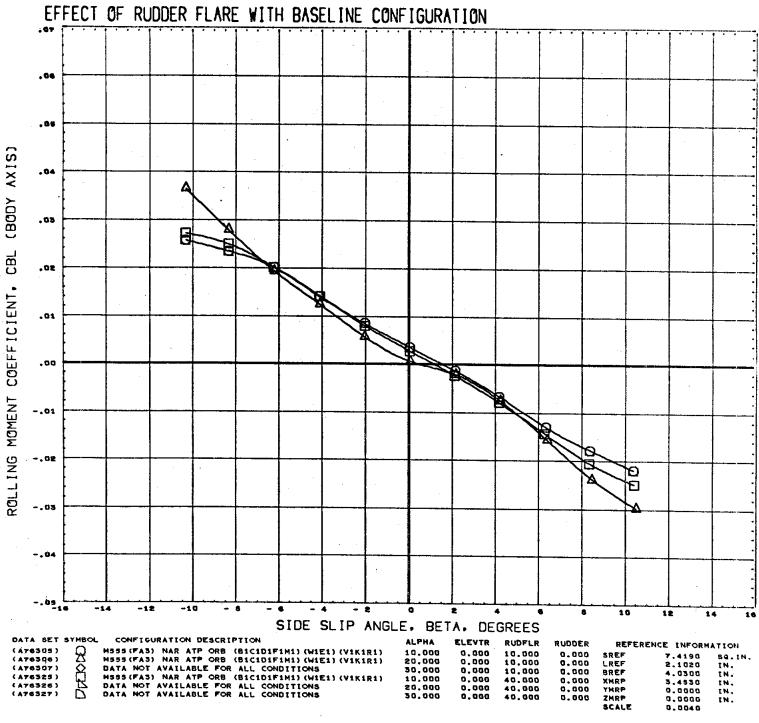
MACH 4.96



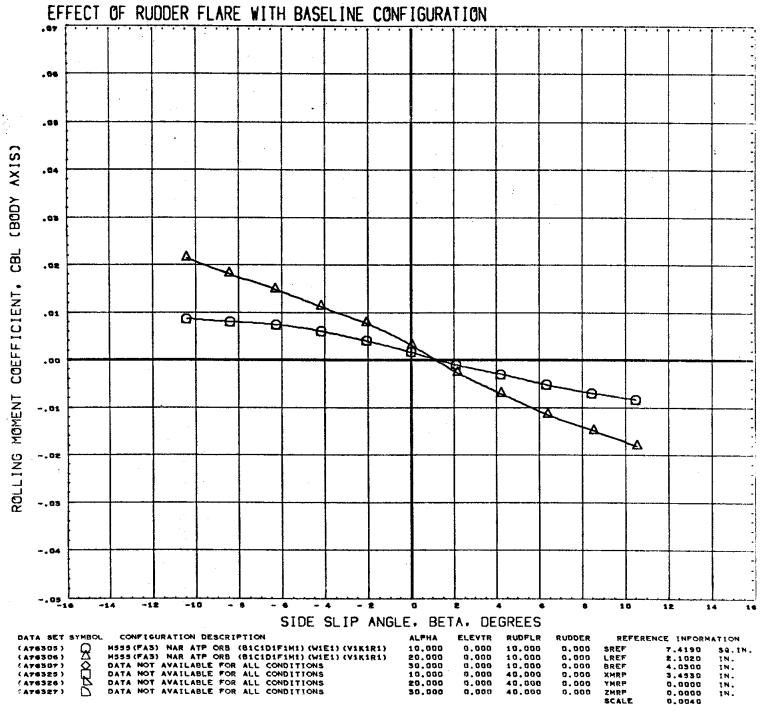


.90

PAGE

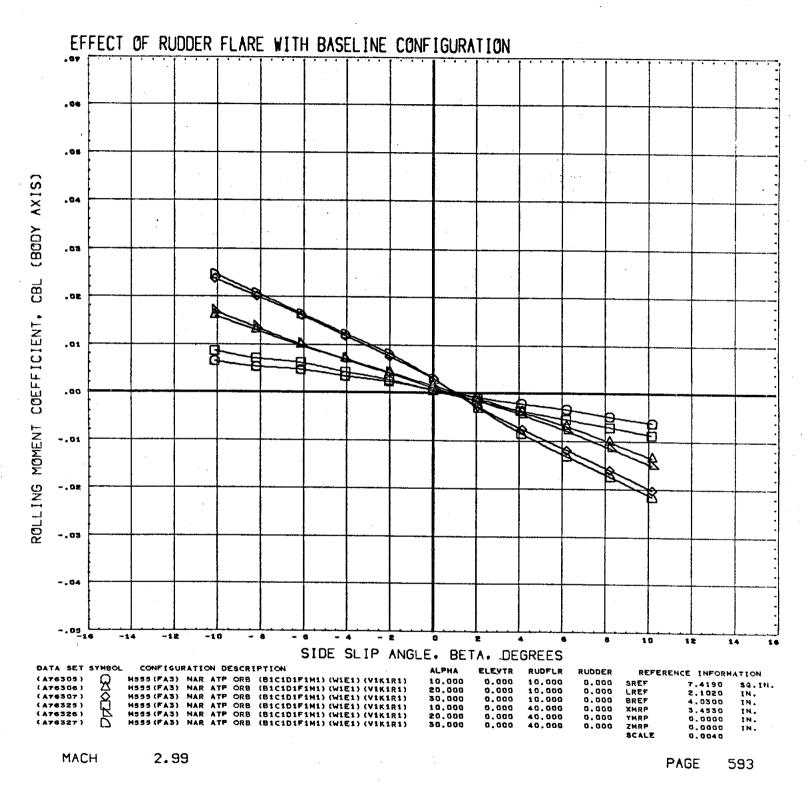


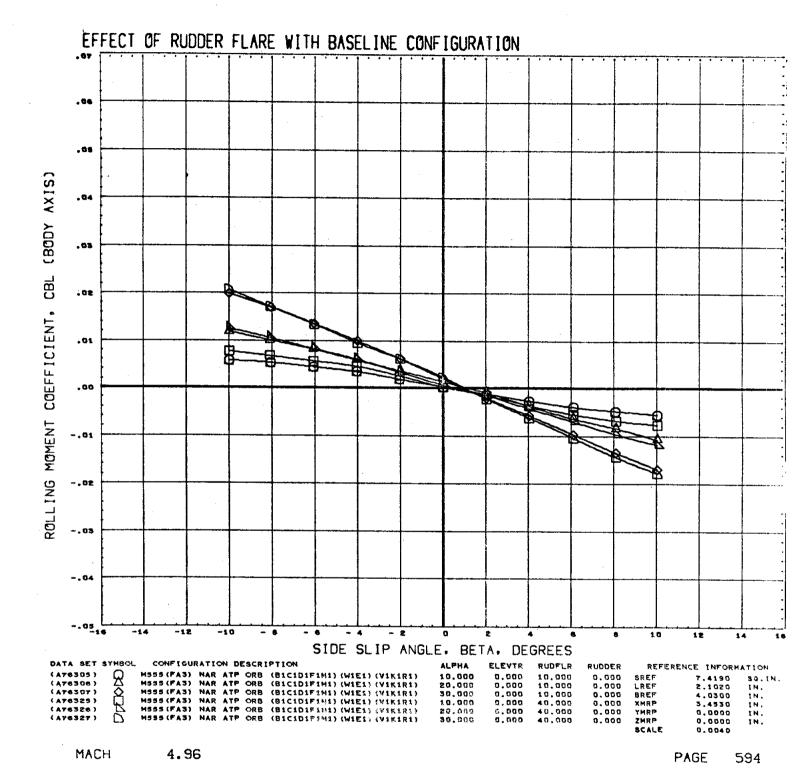
1.20

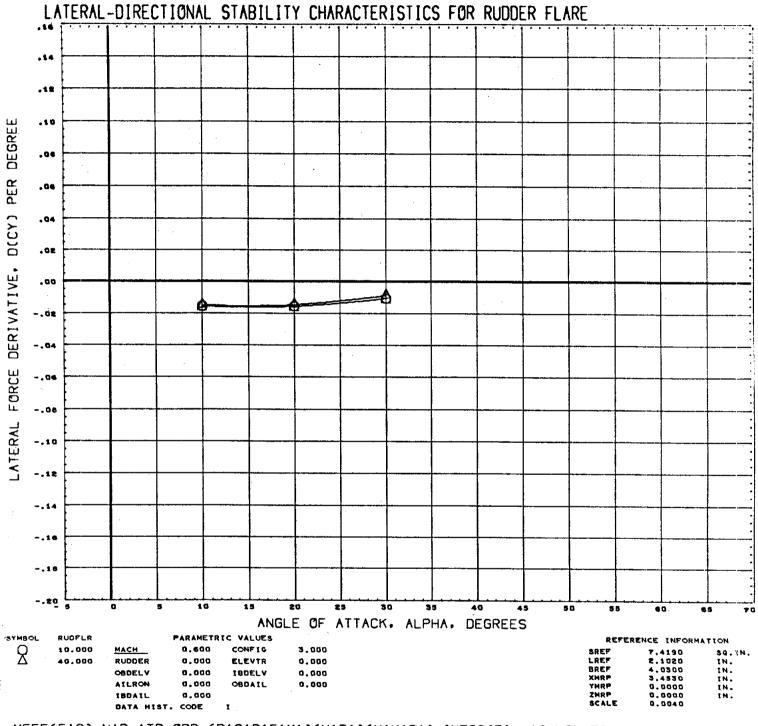


1.96

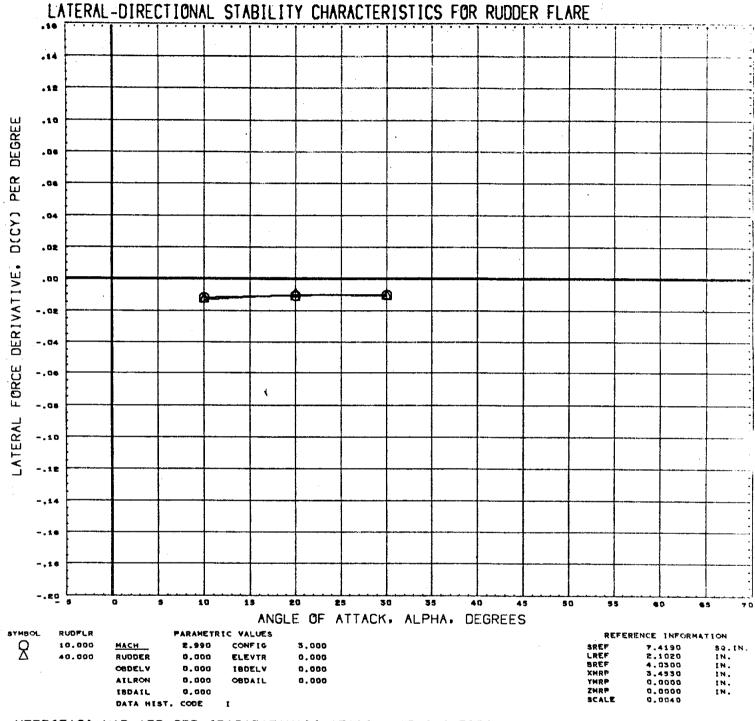
PAGE



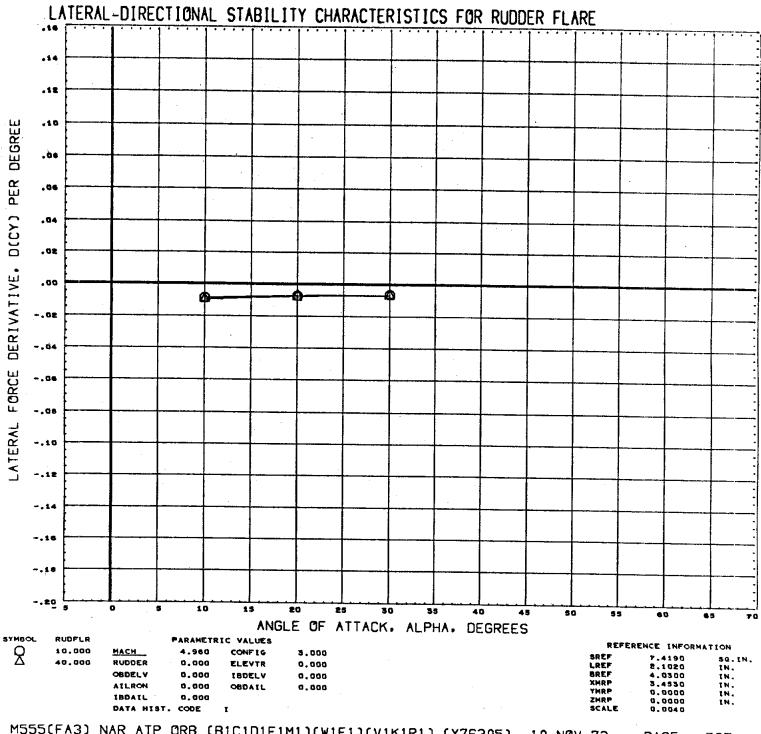




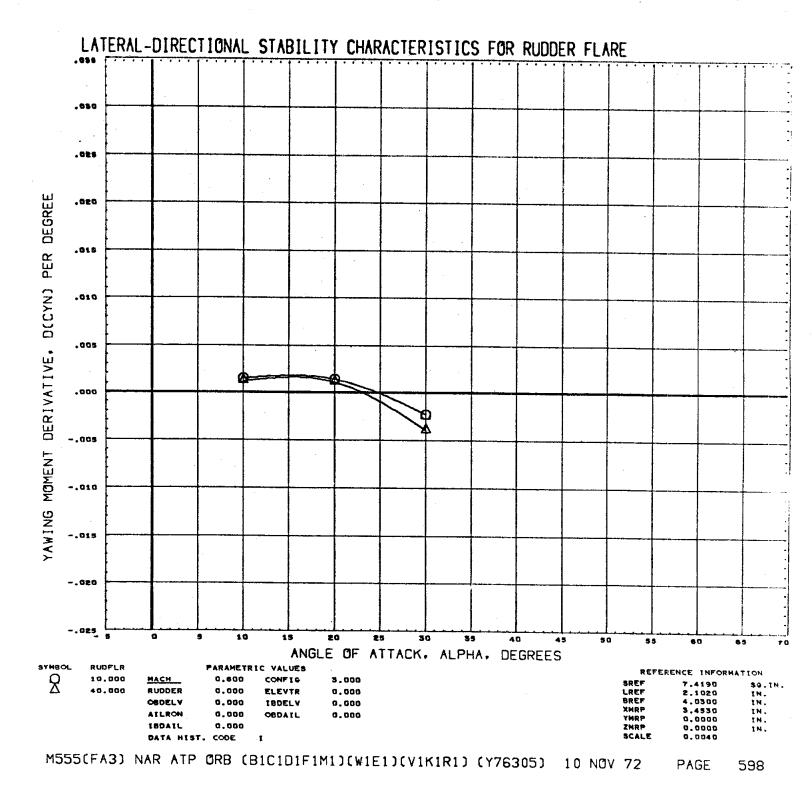
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (Y76305) 10 NOV 72 PAGE 595

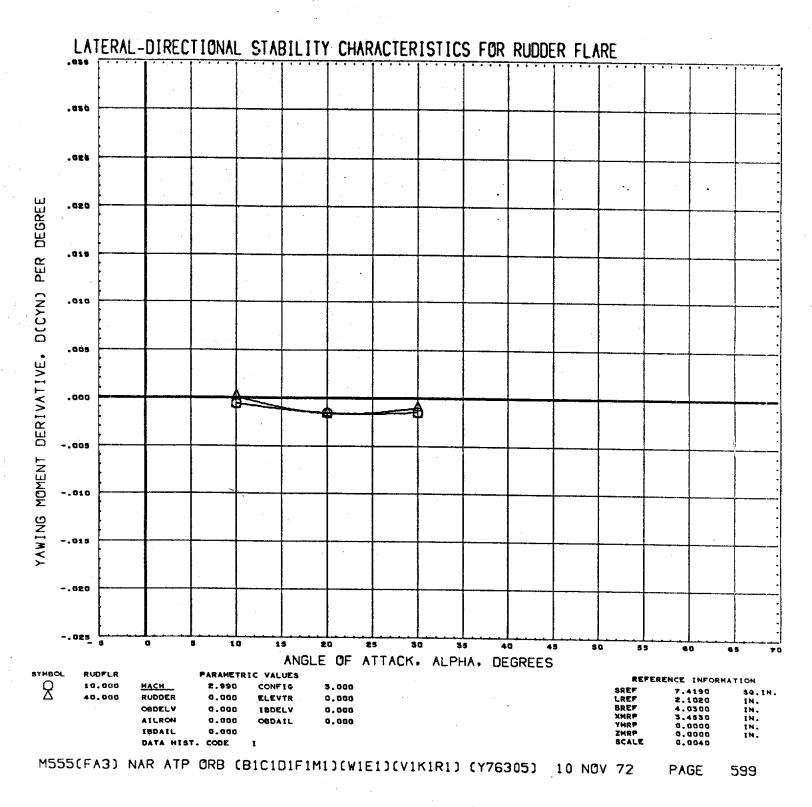


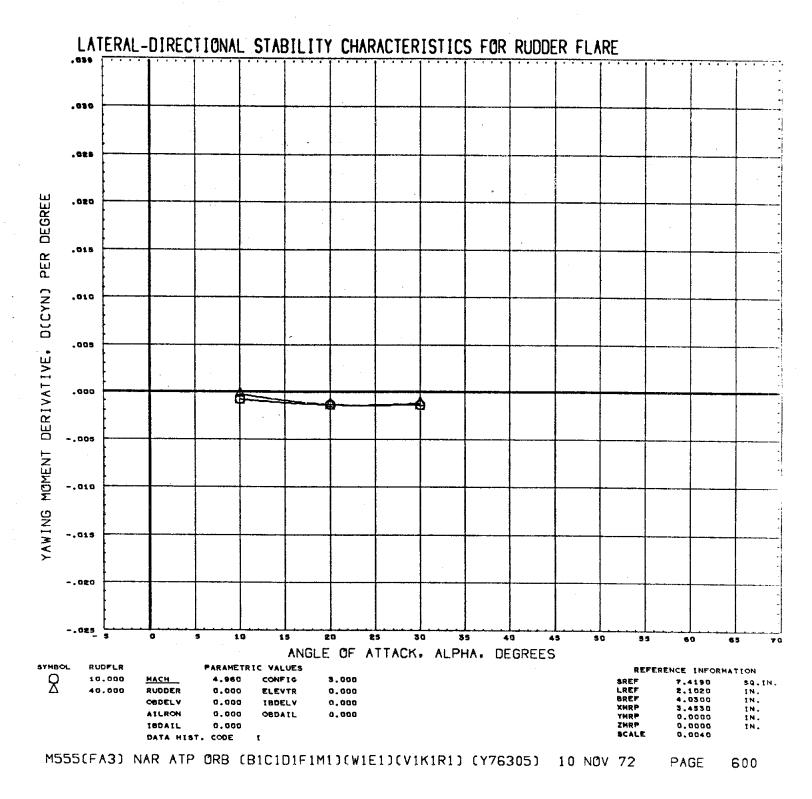
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (Y76305) 10 NOV 72 PAGE 596

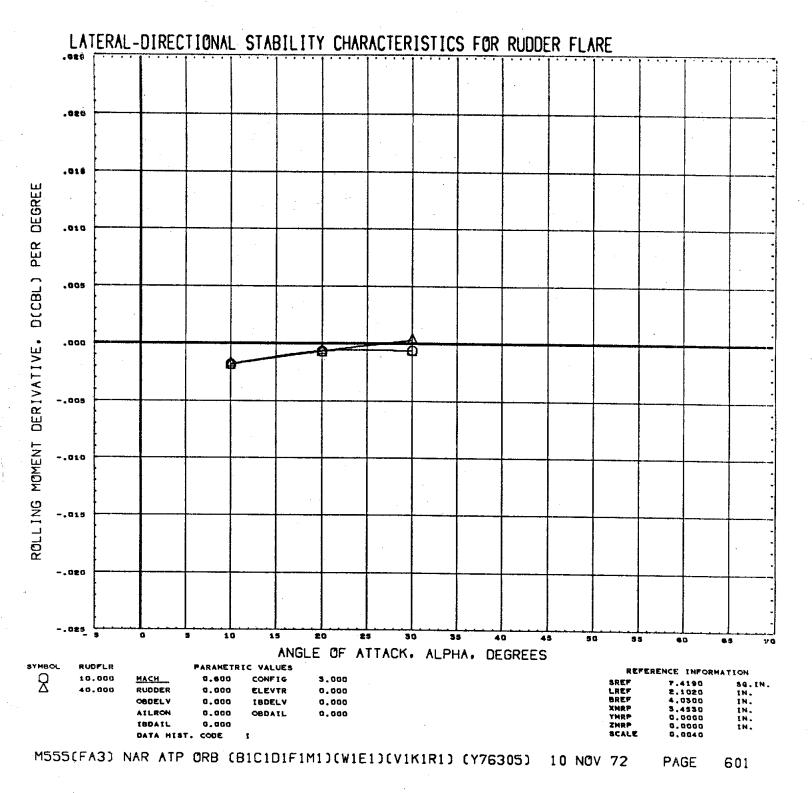


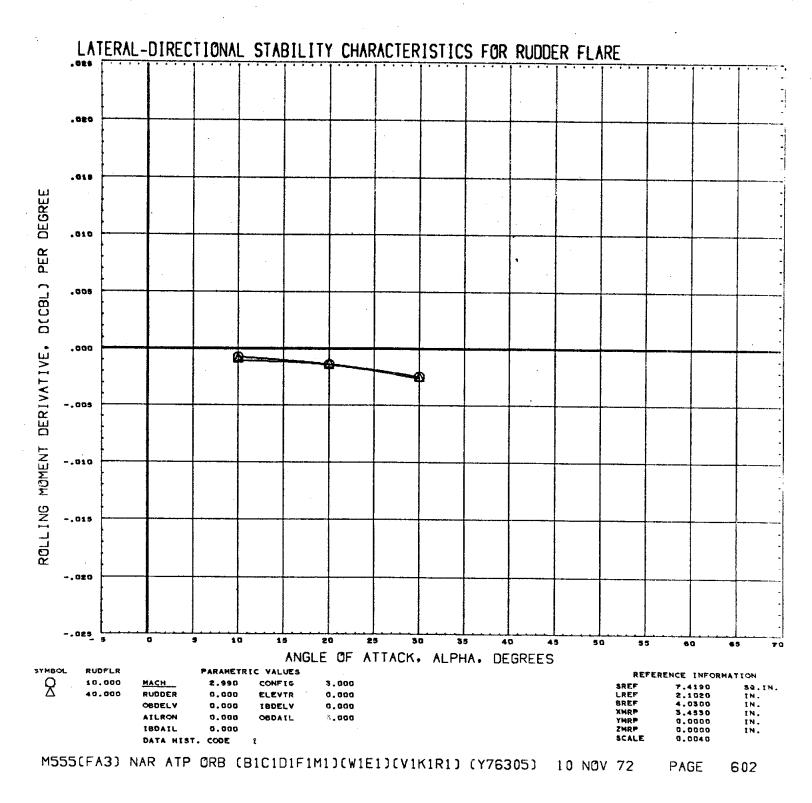
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (Y76305) 10 NOV 72 PAGE 597

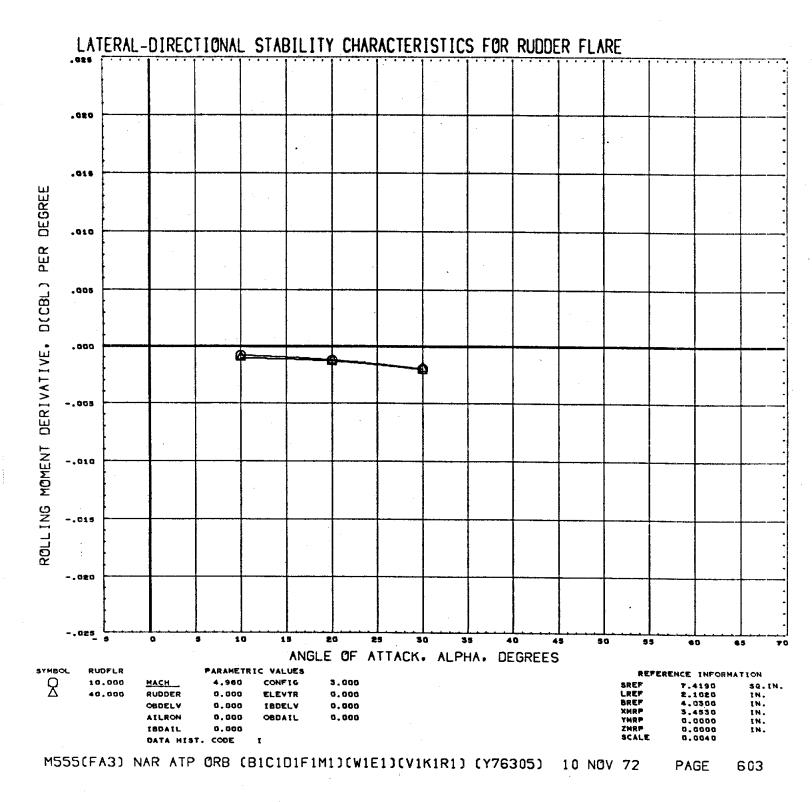


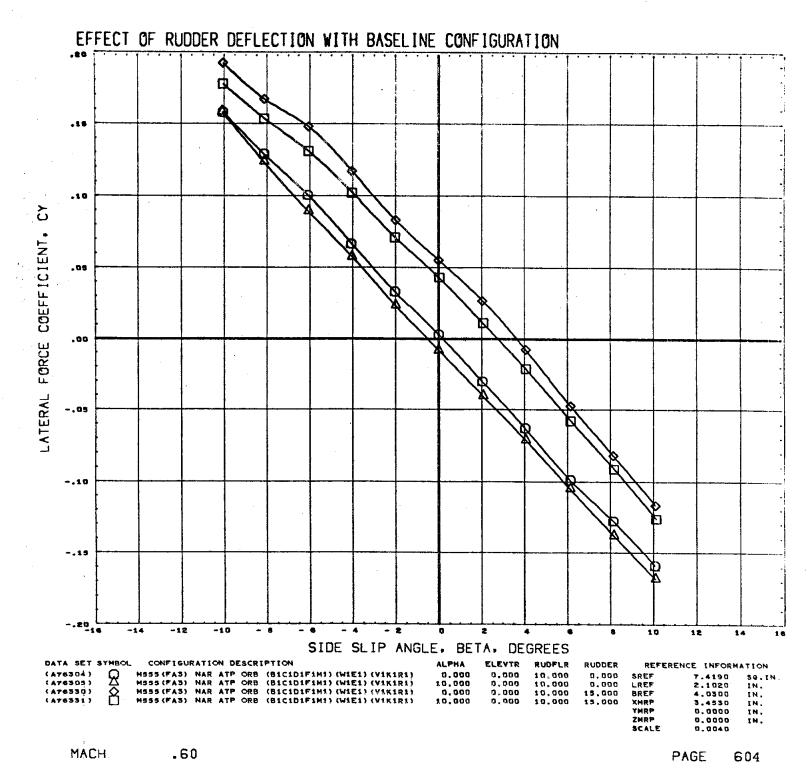


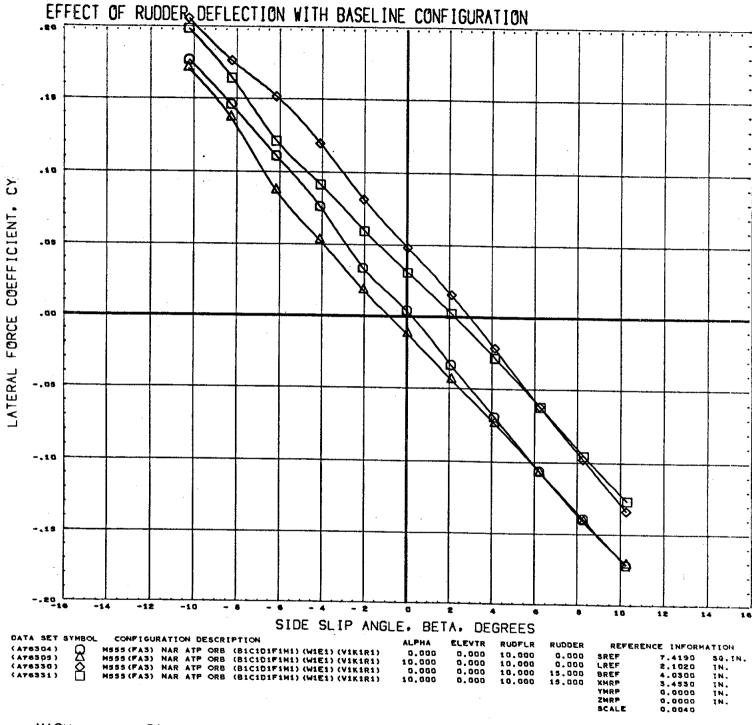






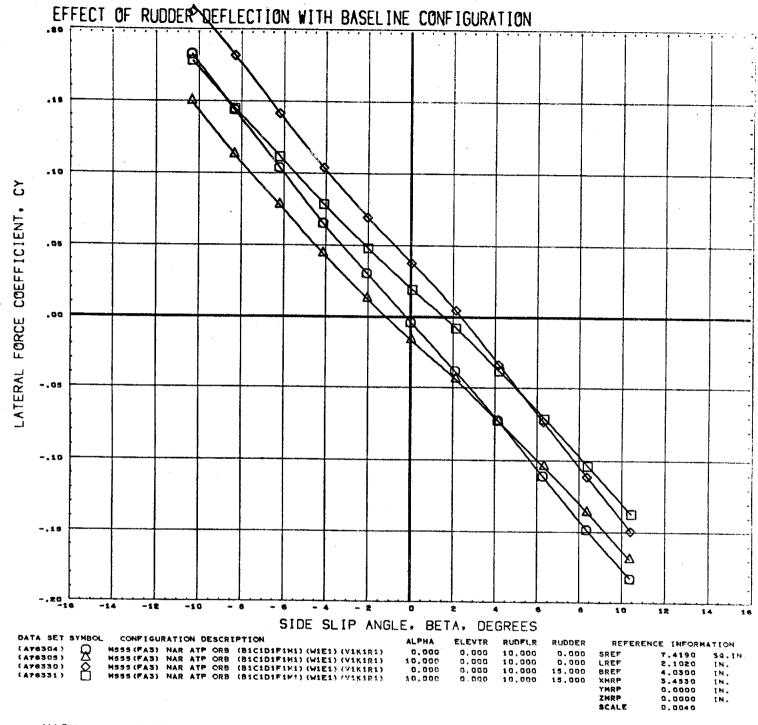


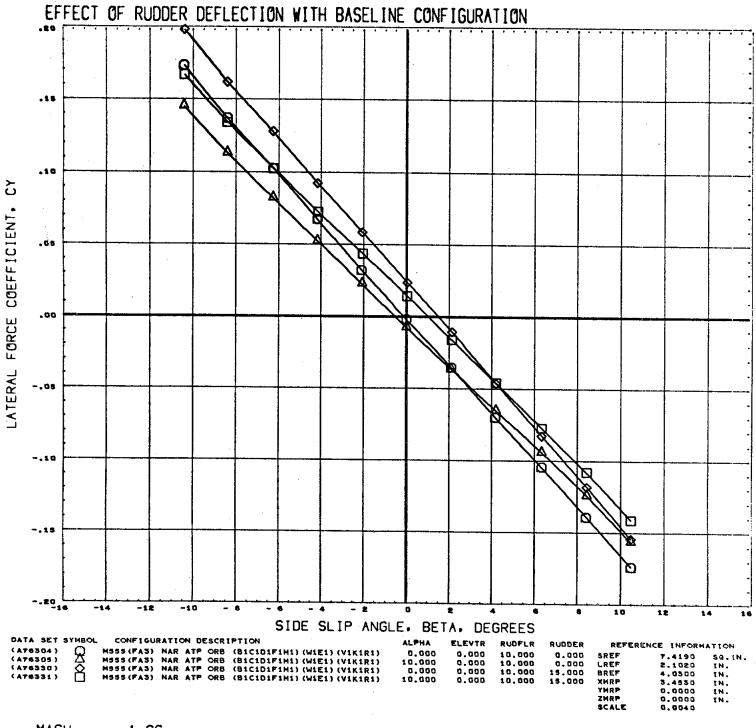


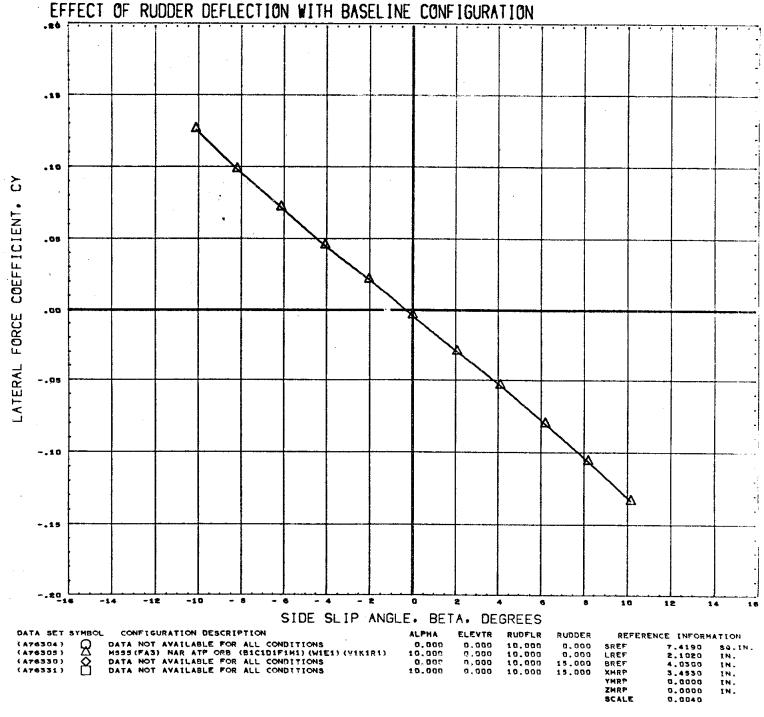


.91

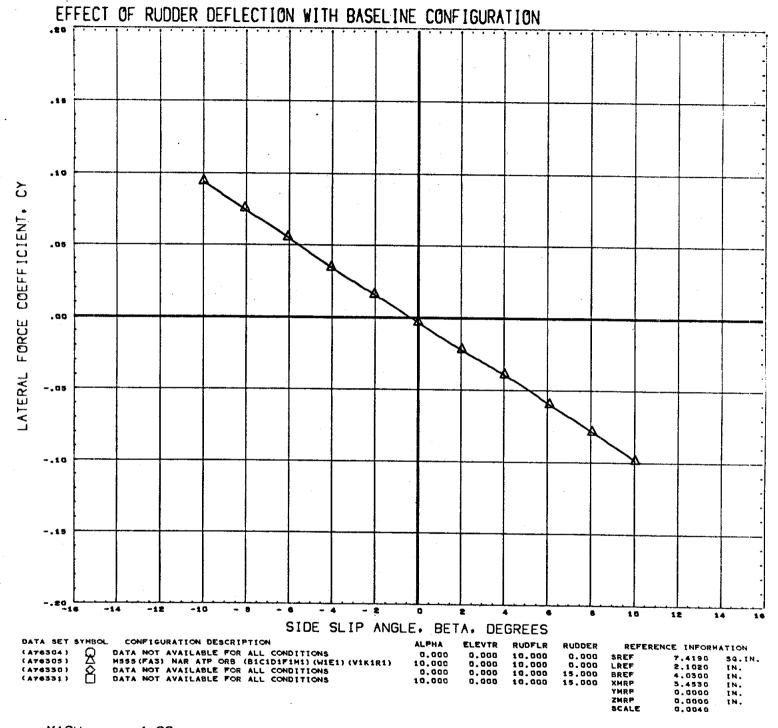
PAGE



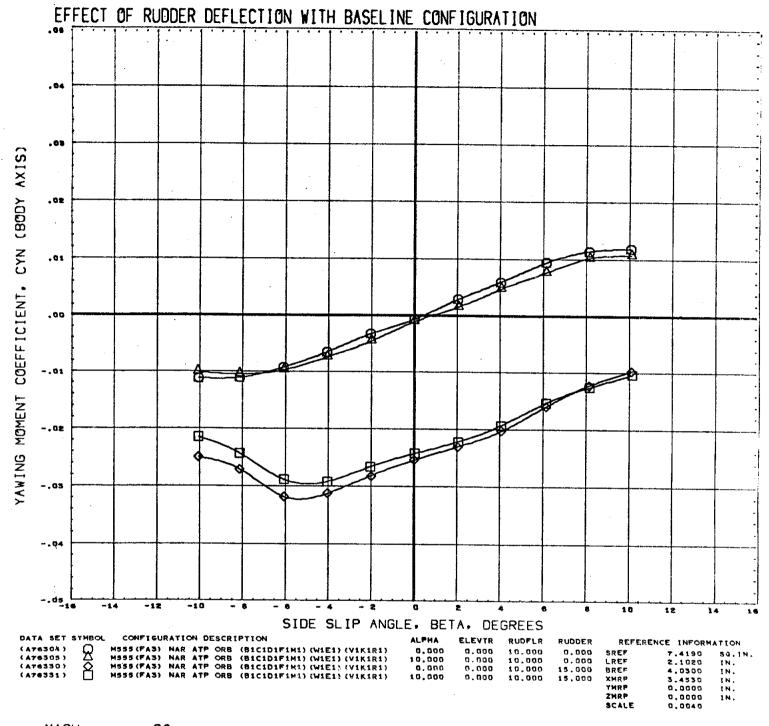


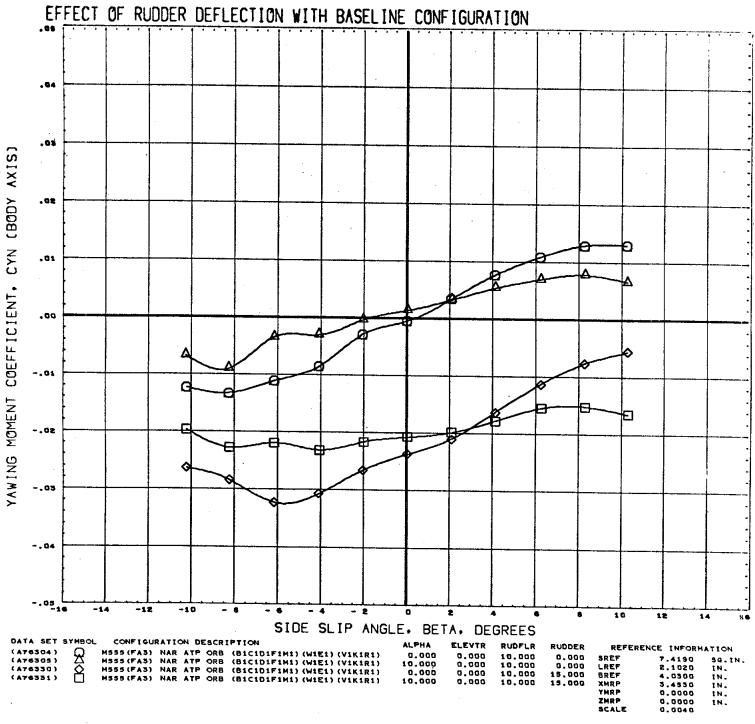


MACH 2.99

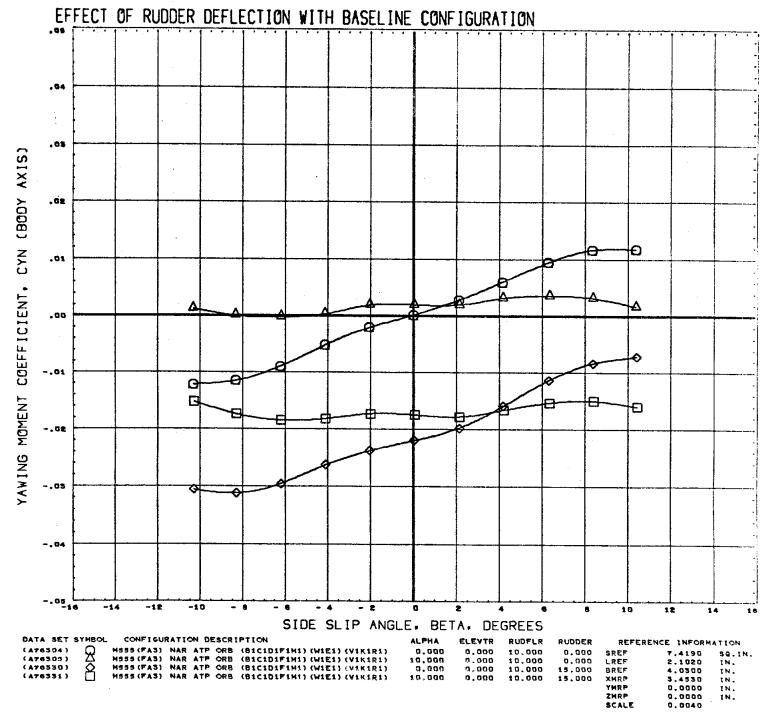


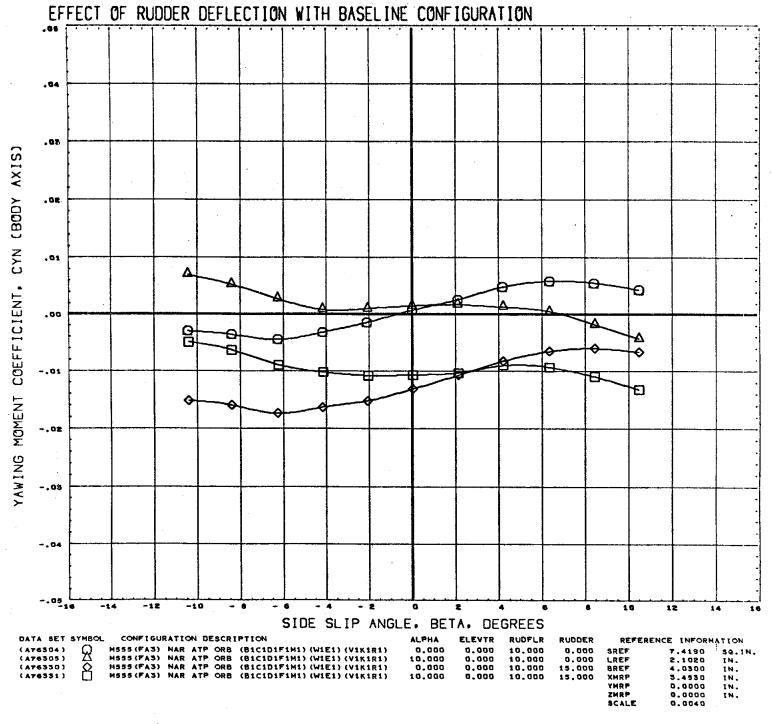
4.96

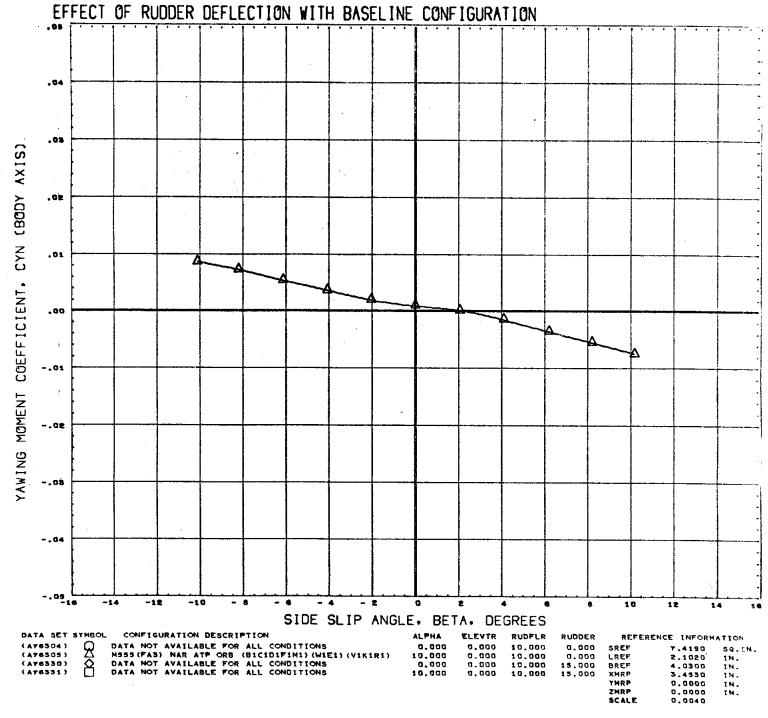




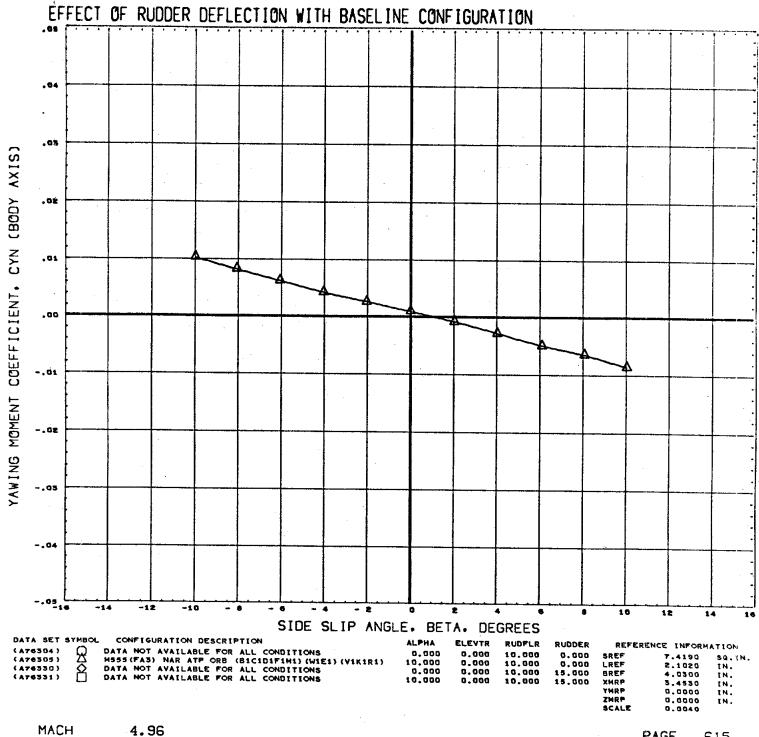
.91



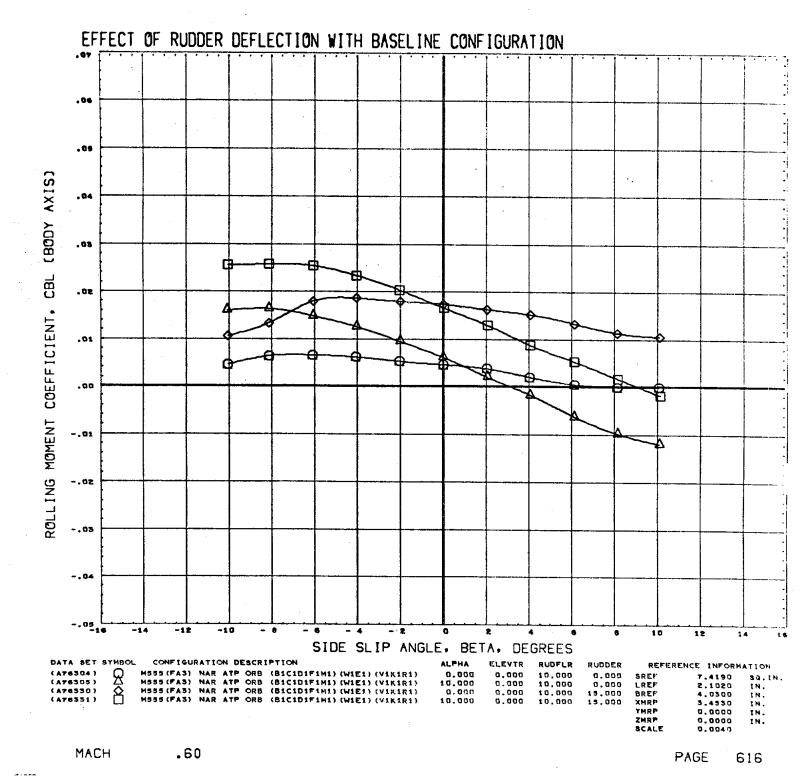


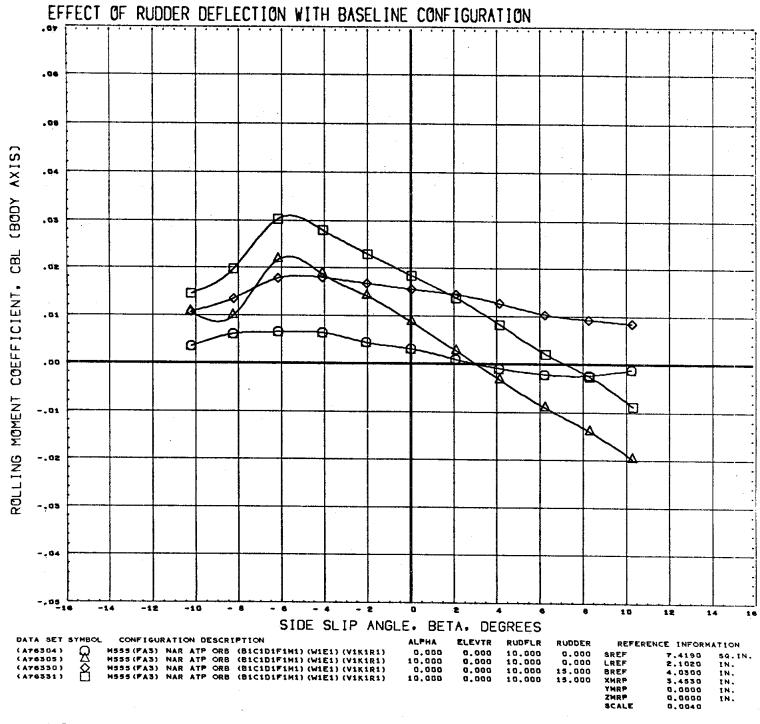


MACH 2.99

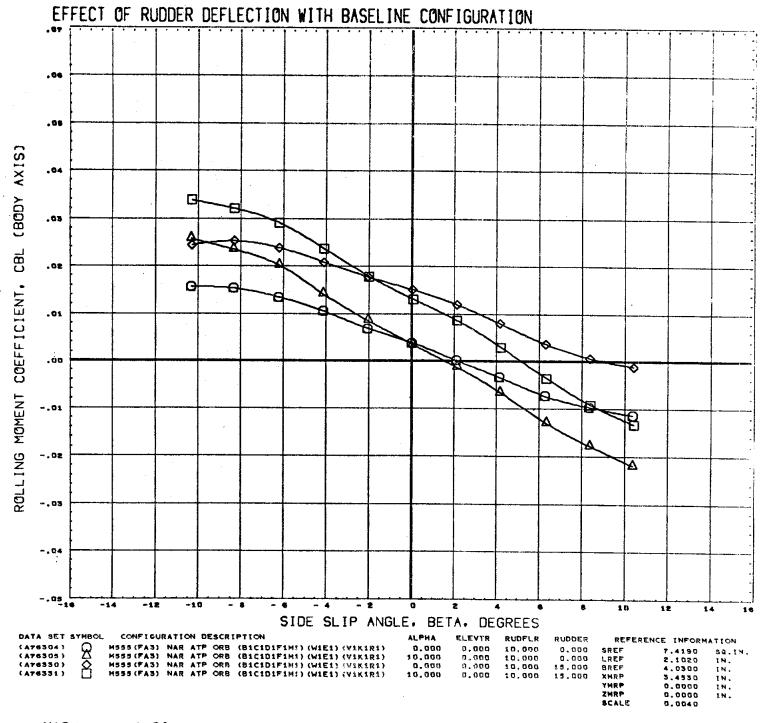


MACH

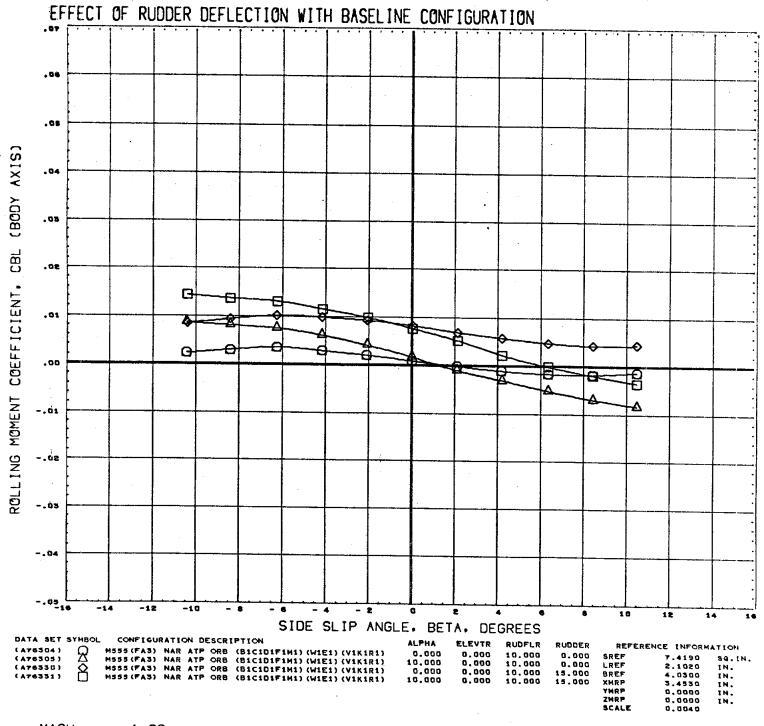




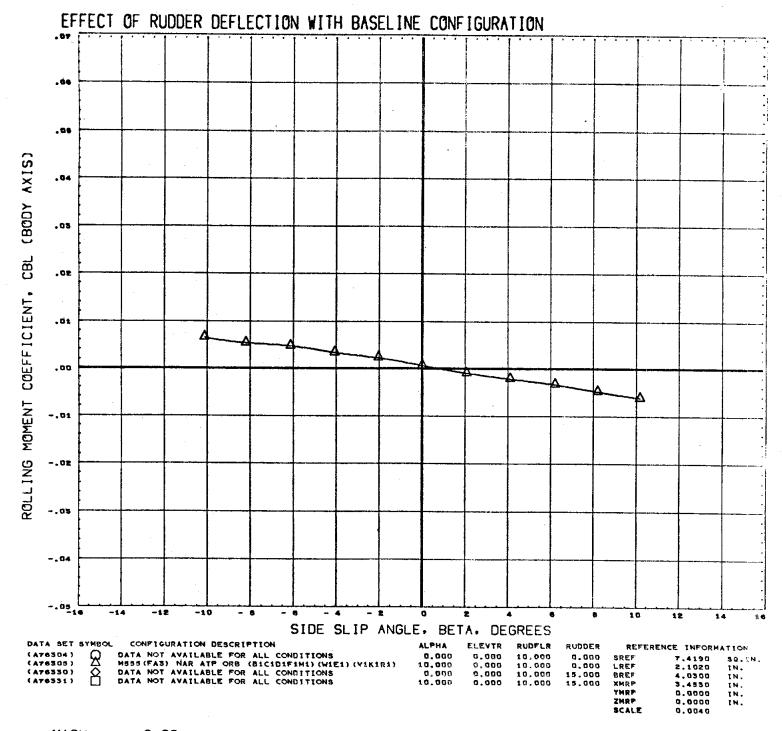
MACH .91



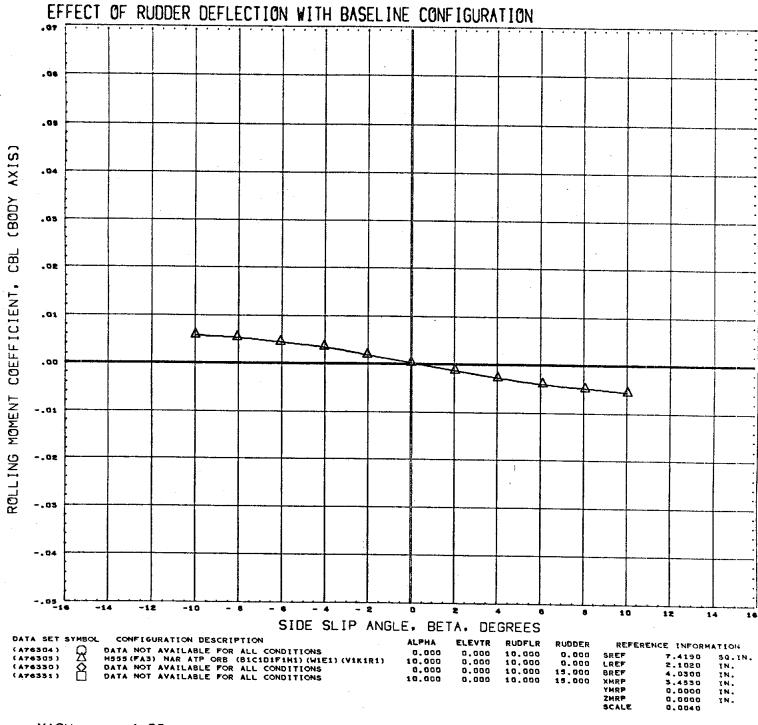
MACH 1.20



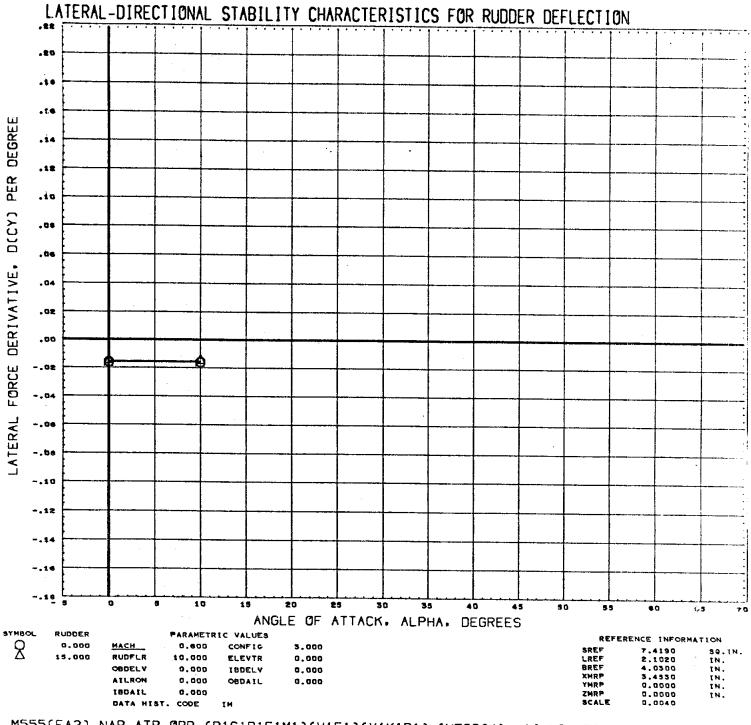
MACH 1.96



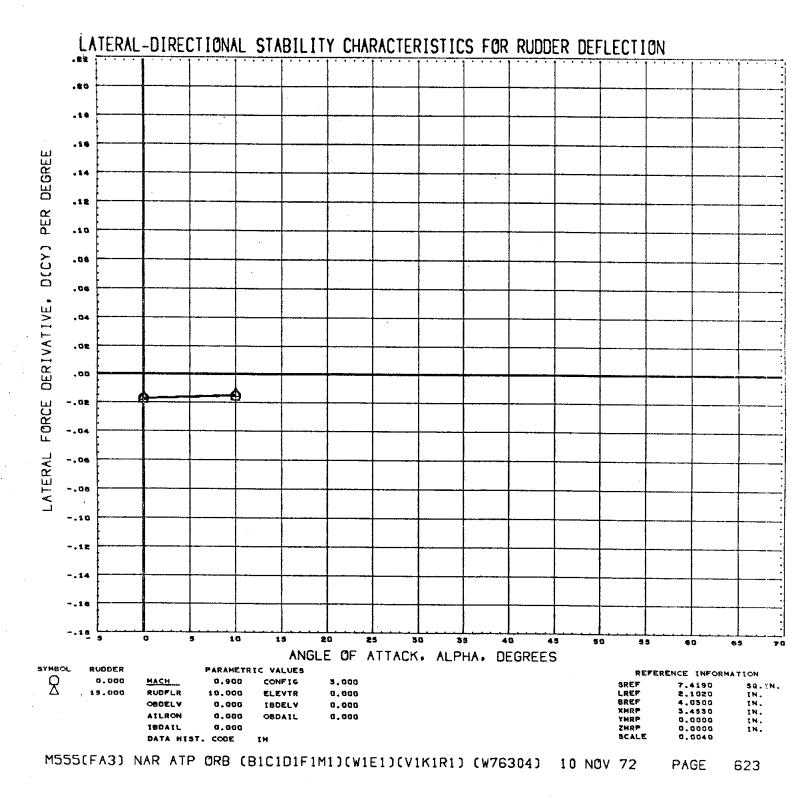
MACH 2.99

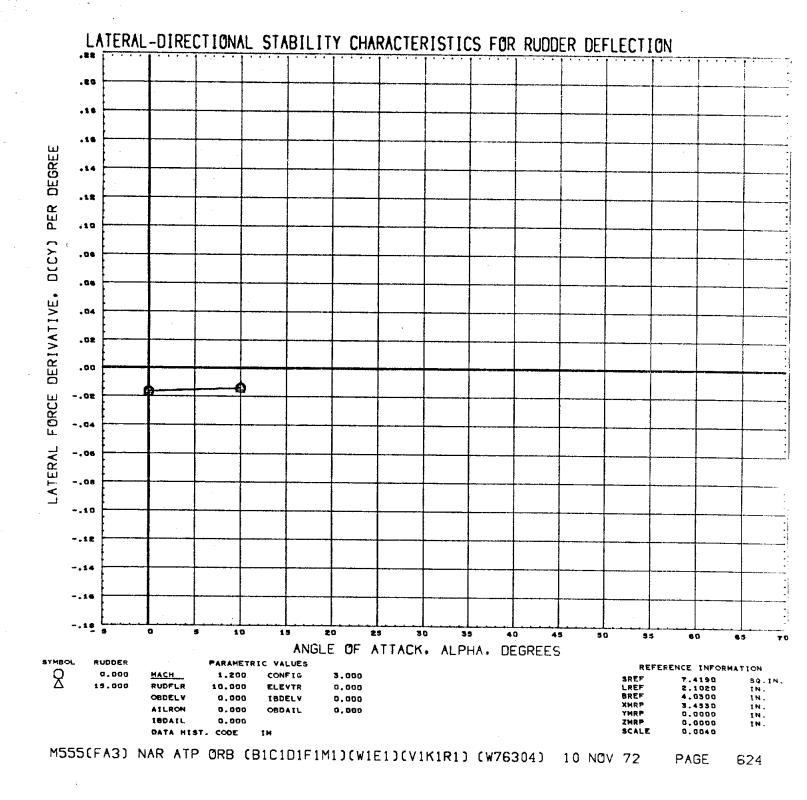


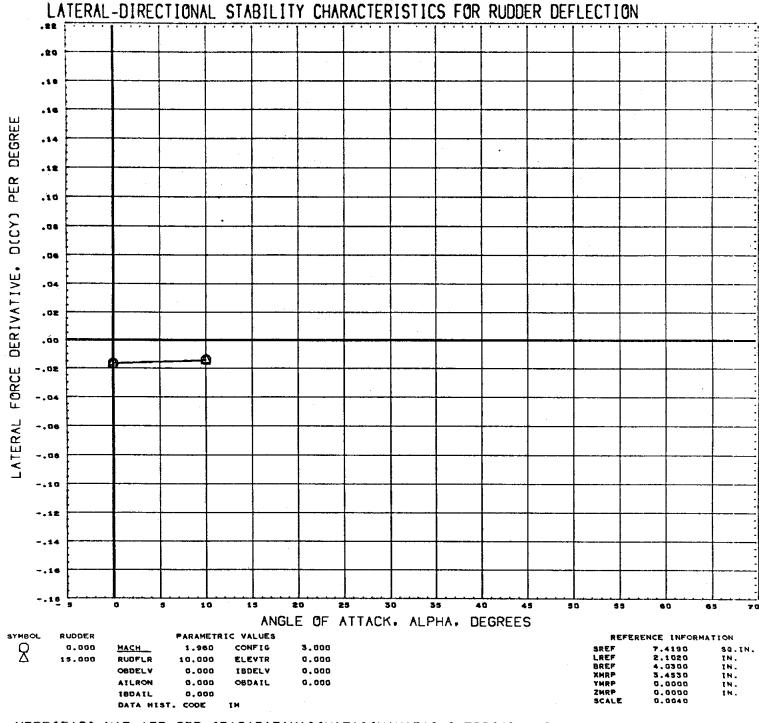
MACH 4.96



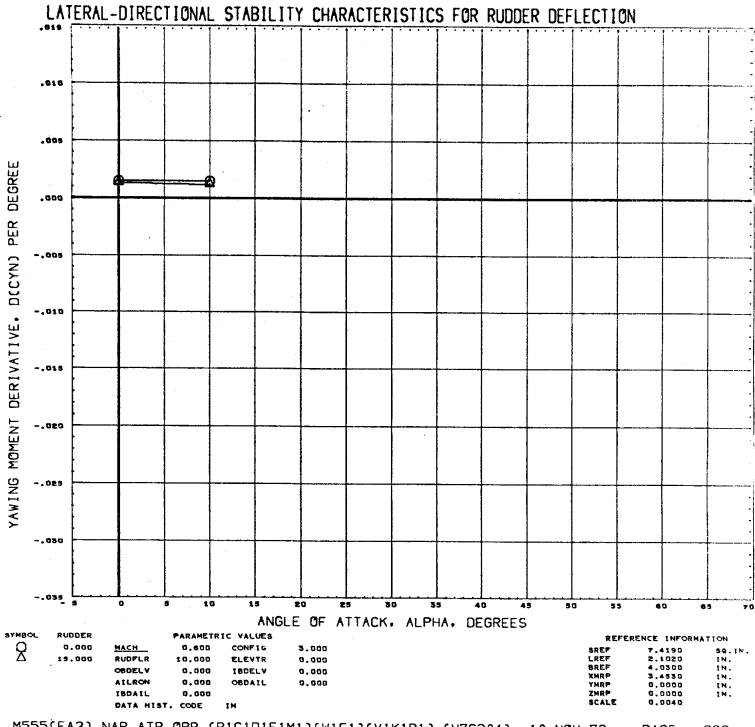
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (W76304) 10 NOV 72 PAGE 622



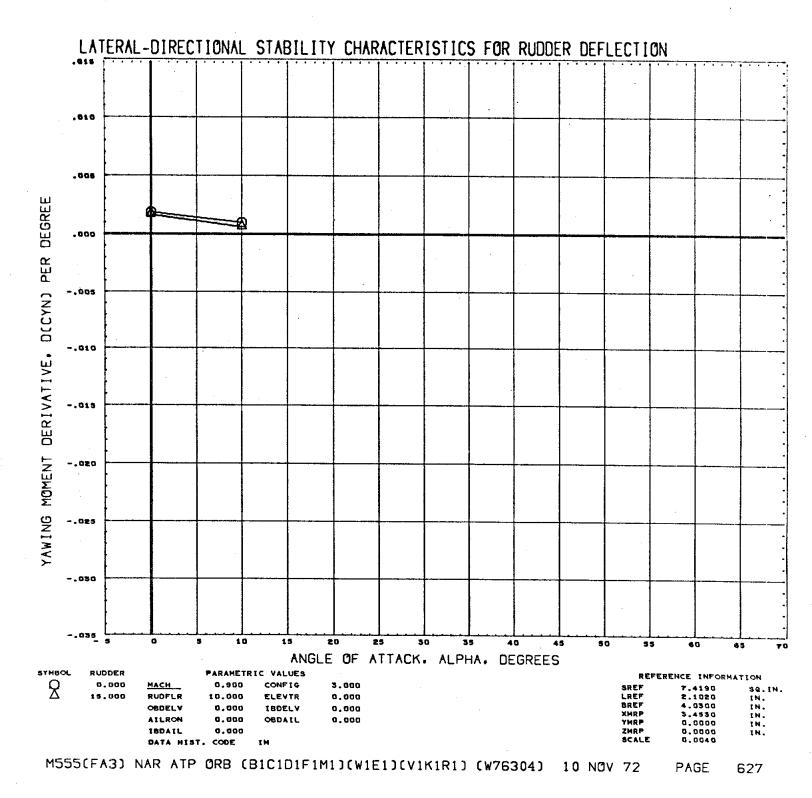


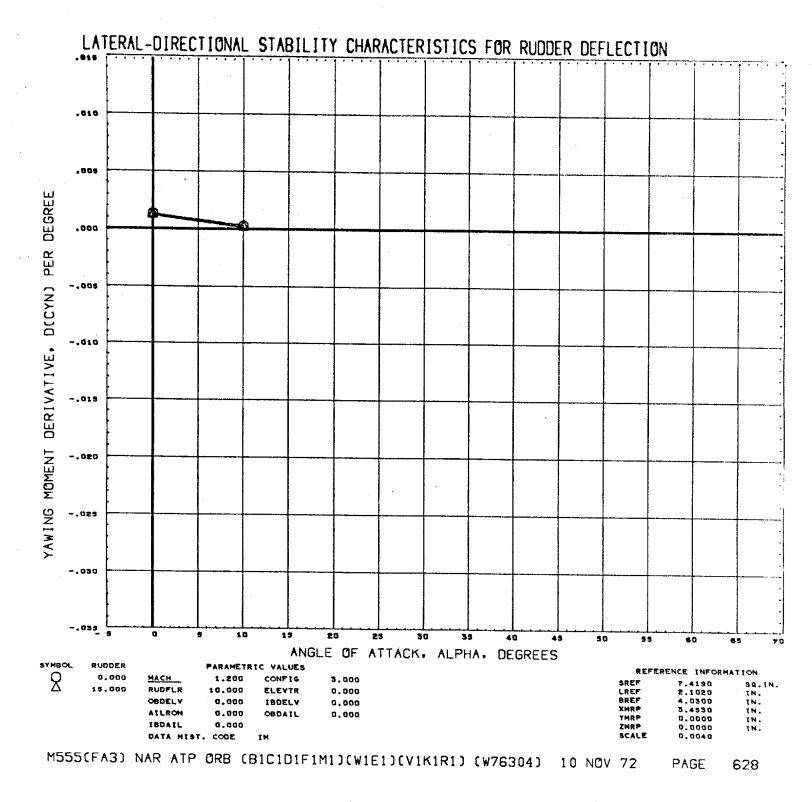


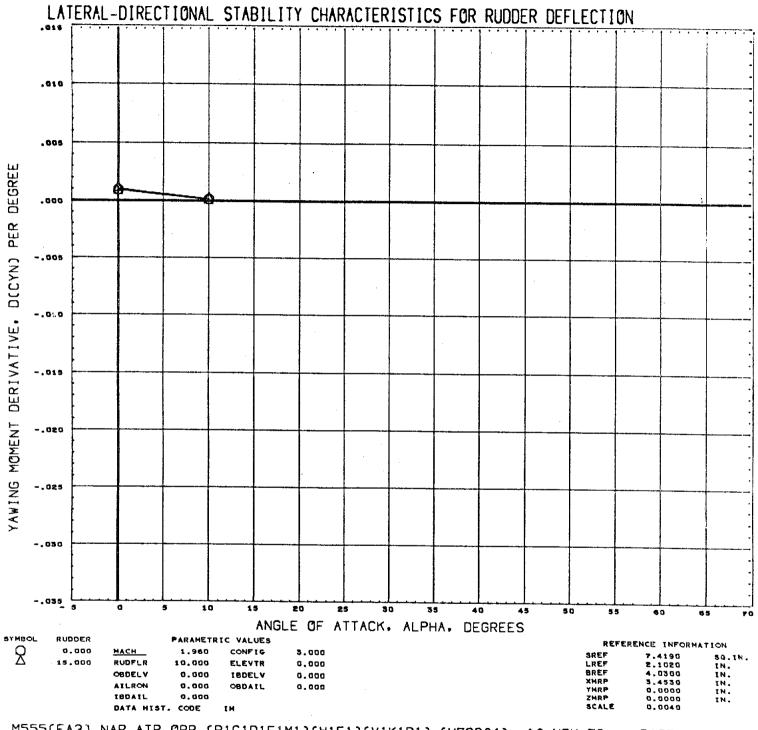
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (W76304) 10 NOV 72 PAGE 625



M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (W76304) 10 NOV 72 PAGE 626



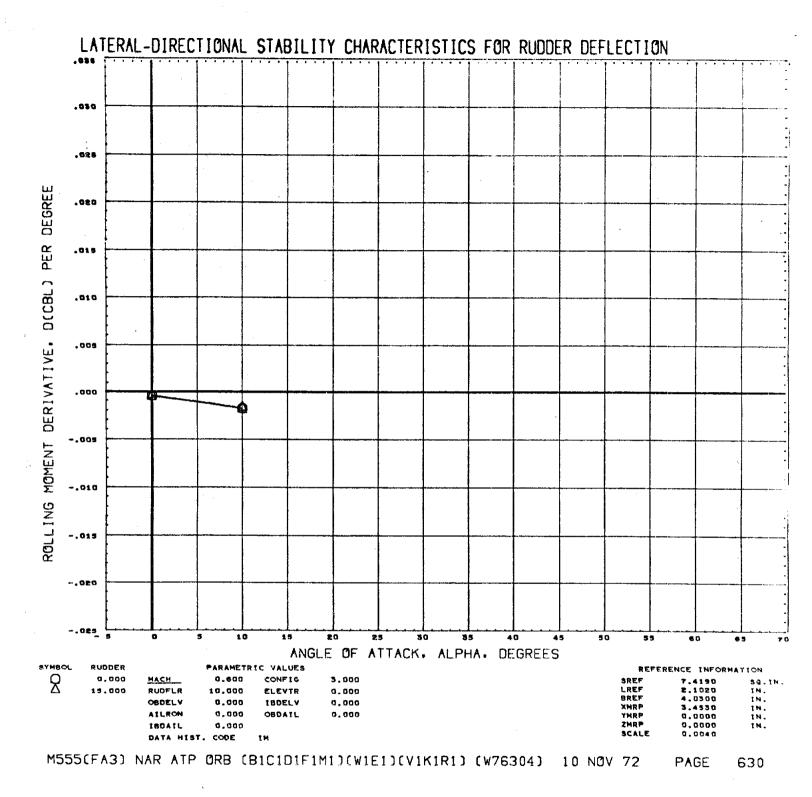


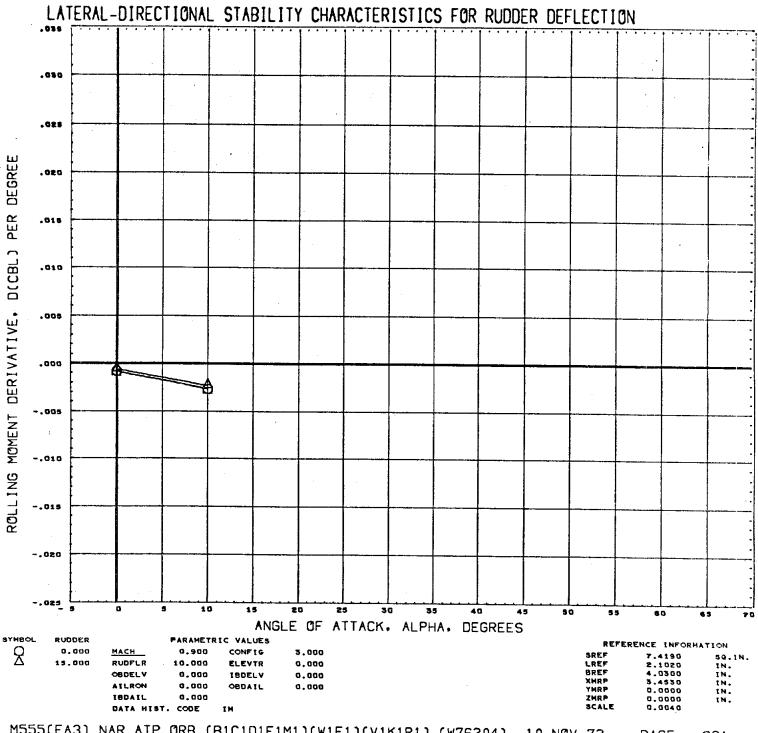


M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (W76304) 10 NOV 72

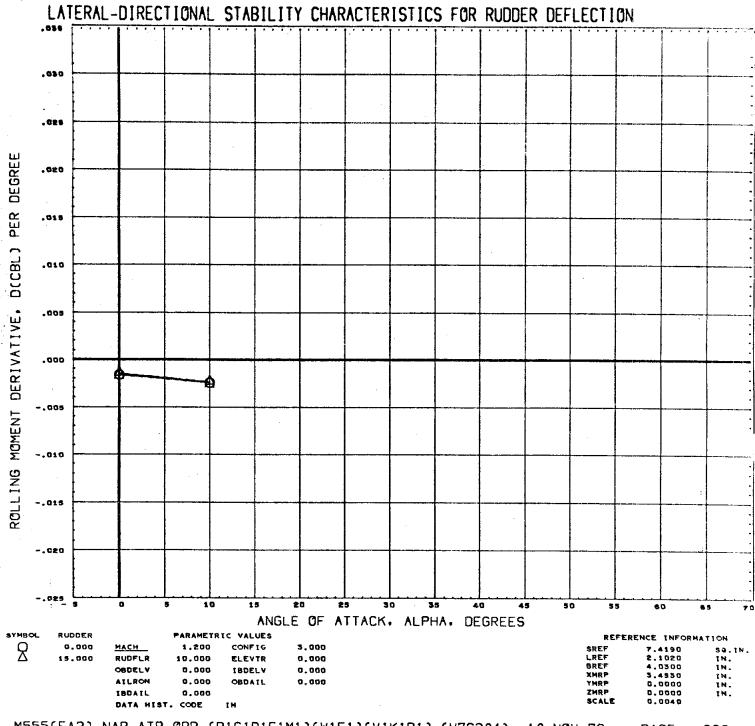
PAGE

629

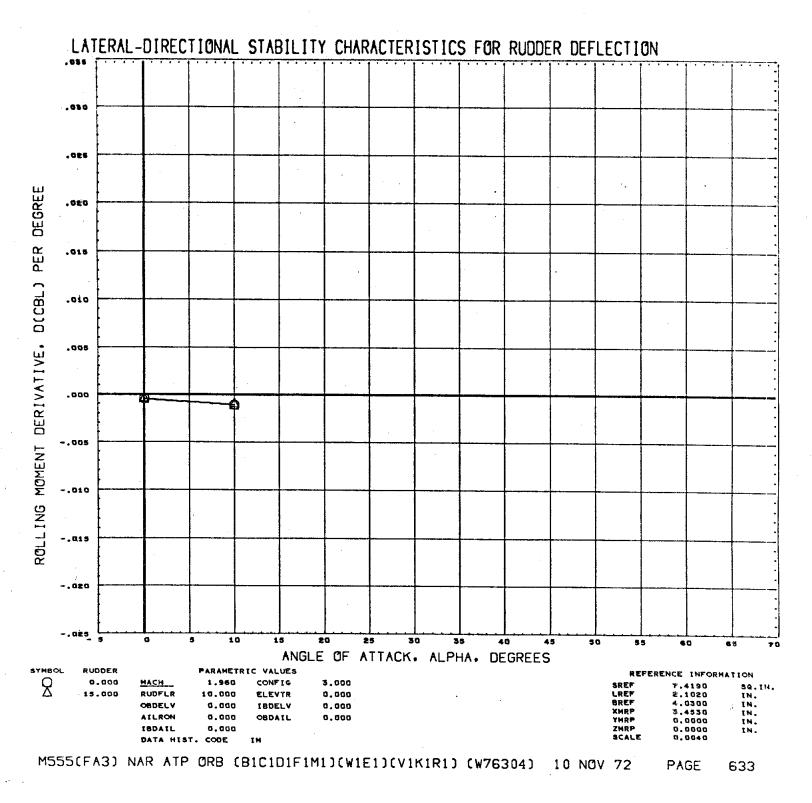


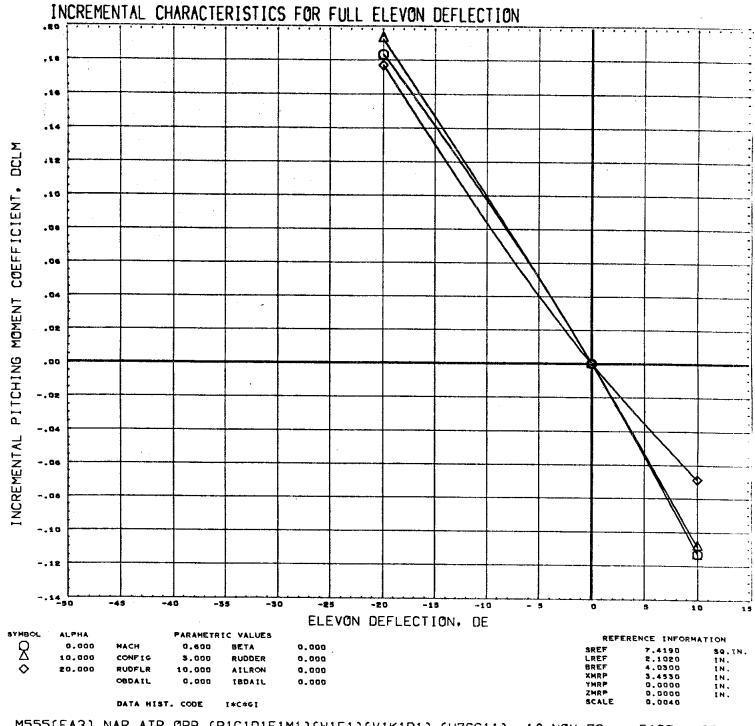


M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (W76304) 10 NOV 72 PAGE 631

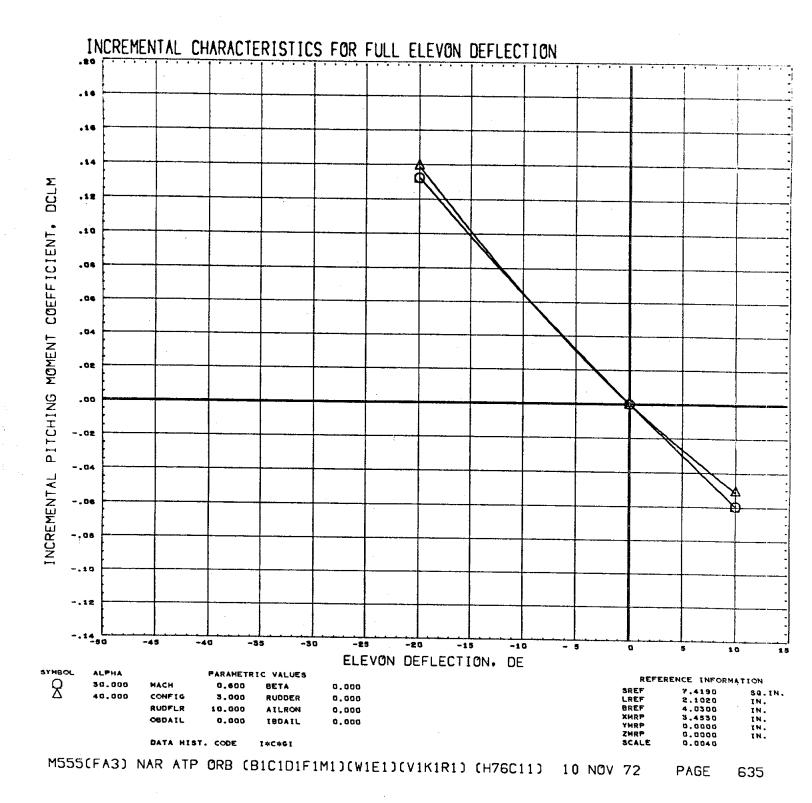


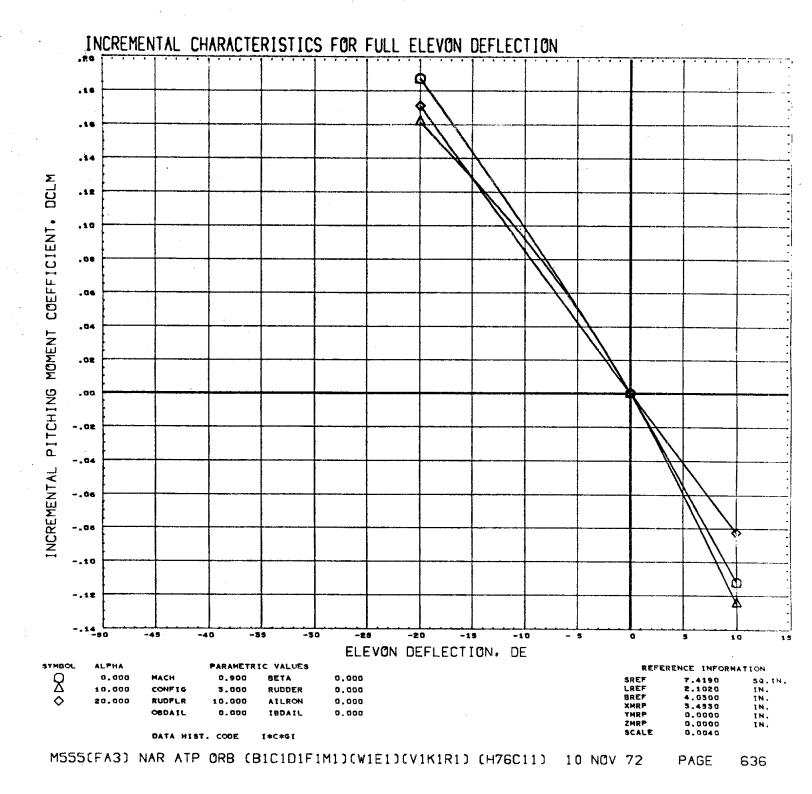
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (W76304) 10 NOV 72 PAGE 632

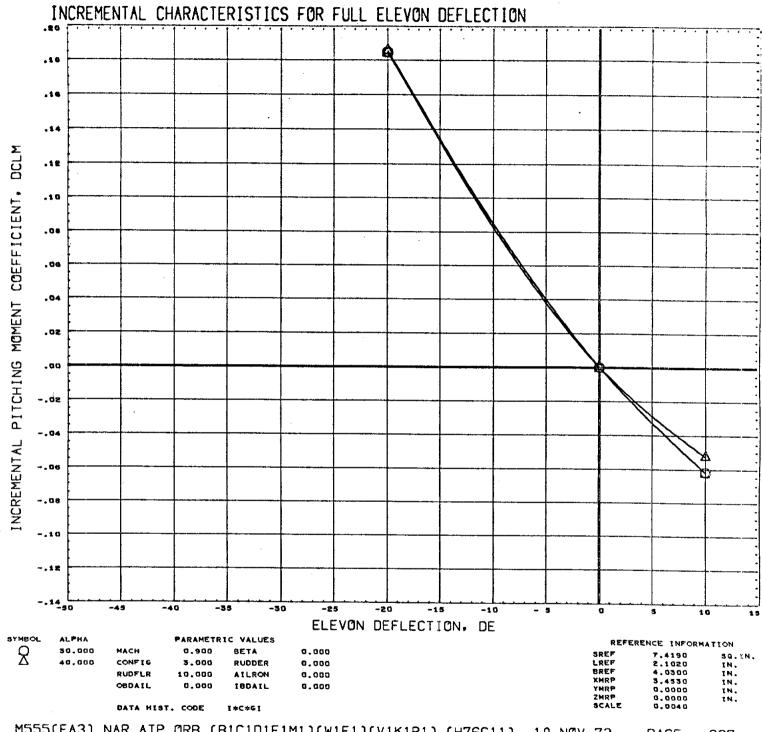




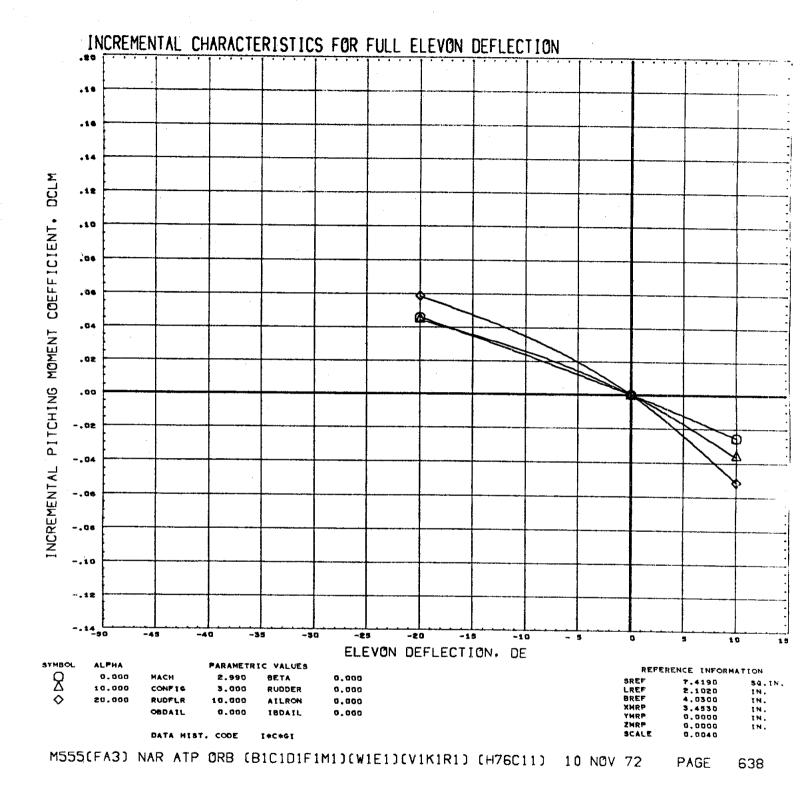
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (H76C11) 10 NOV 72 PAGE 634

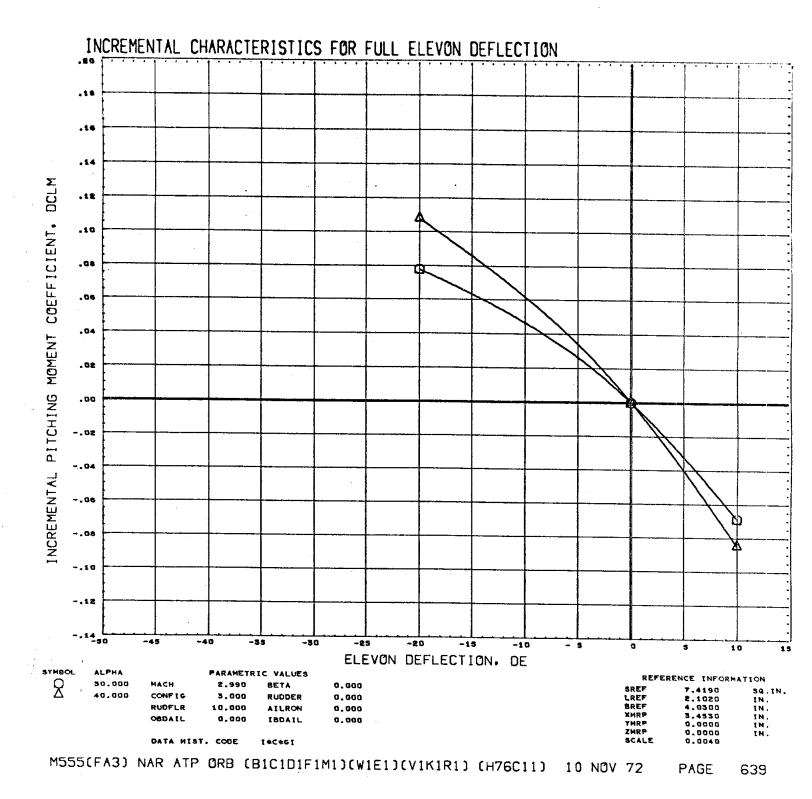


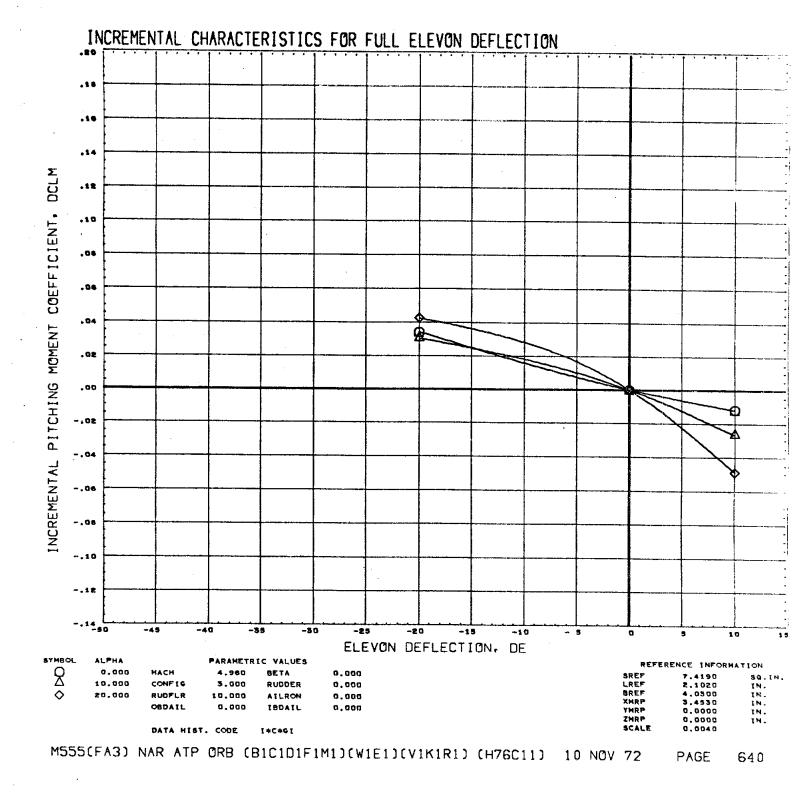


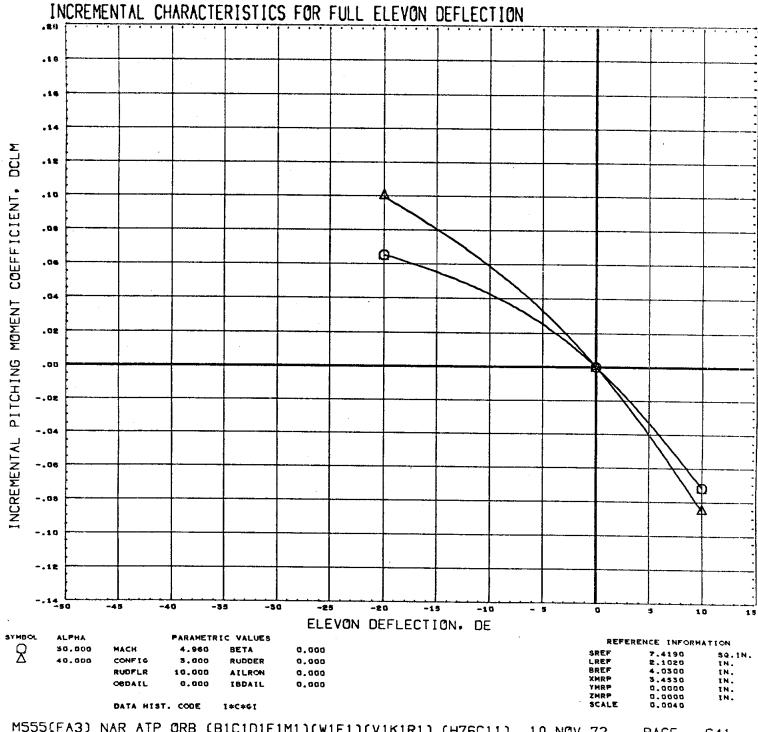


M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (H76C11) 10 NOV 72 PAGE 637

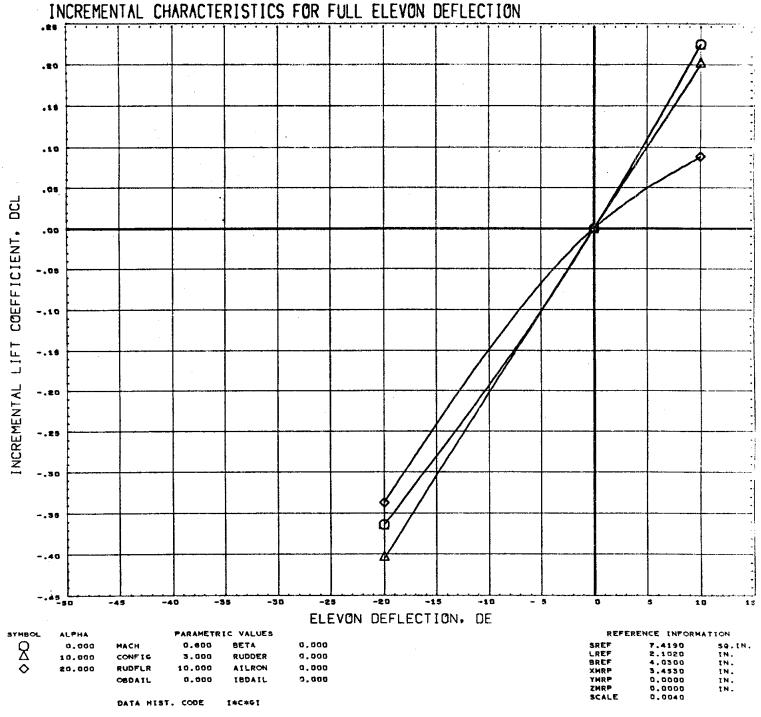




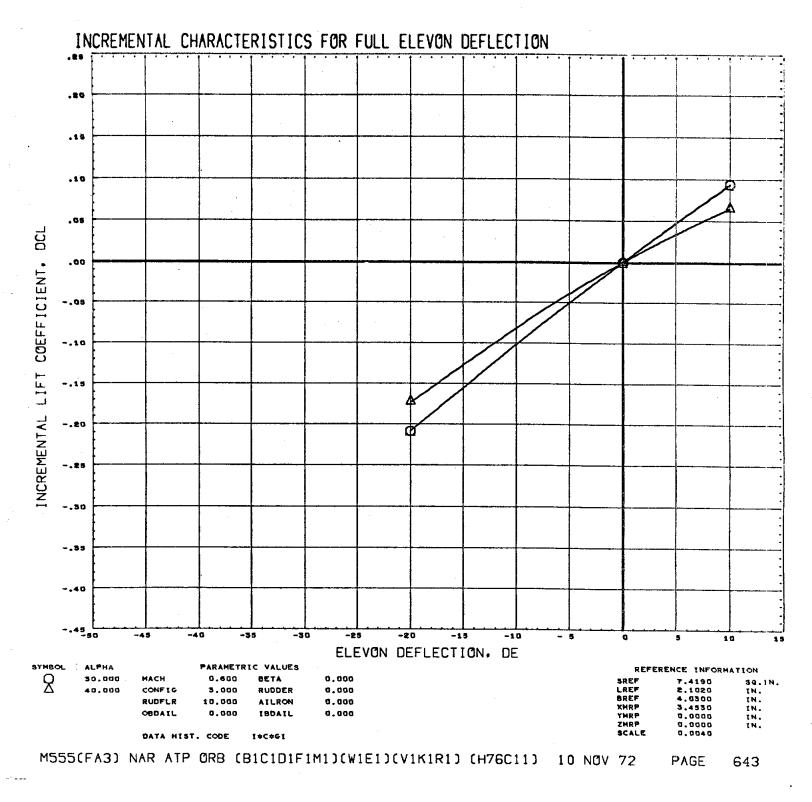


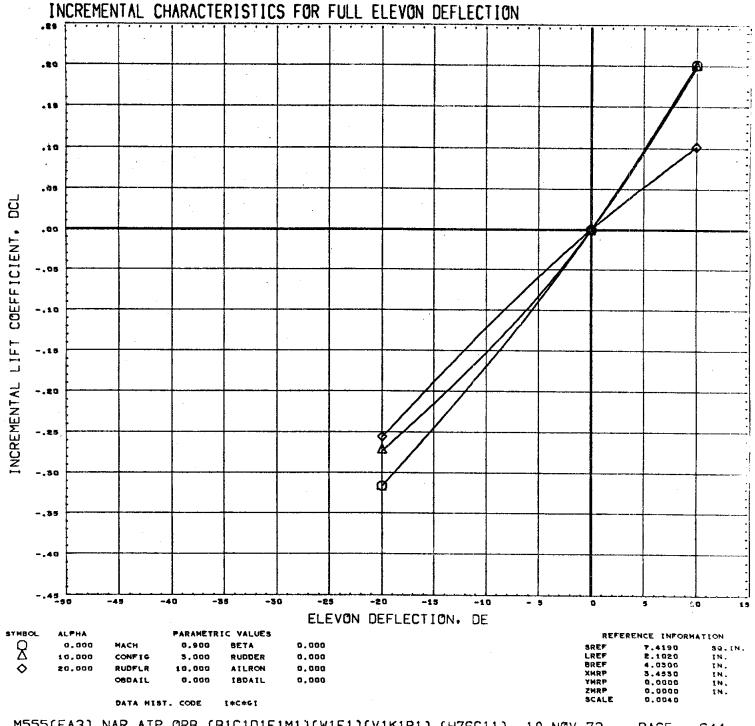


M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (H76C11) 10 NOV 72 PAGE 641

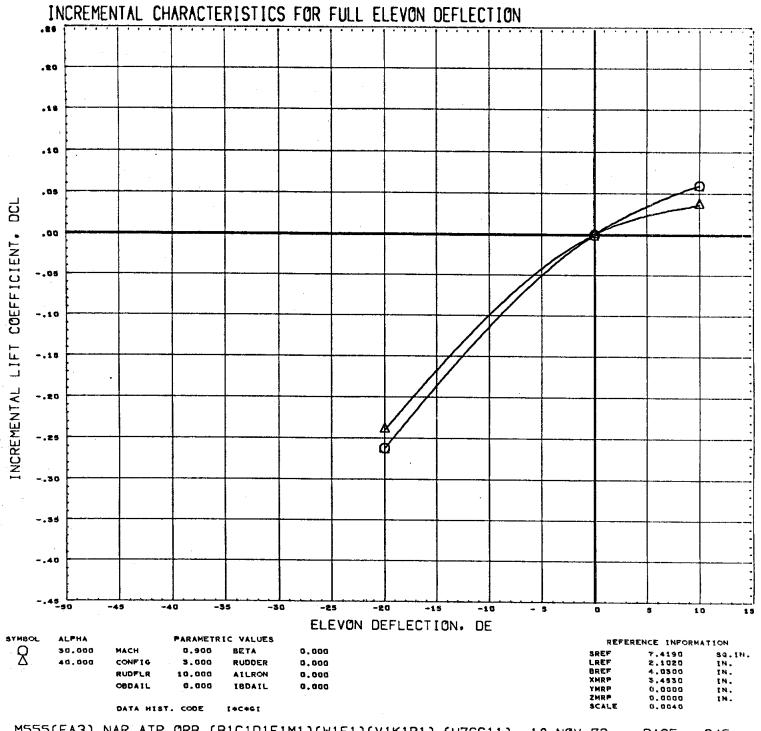


M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (H76C11) 10 NOV 72 PAGE 642

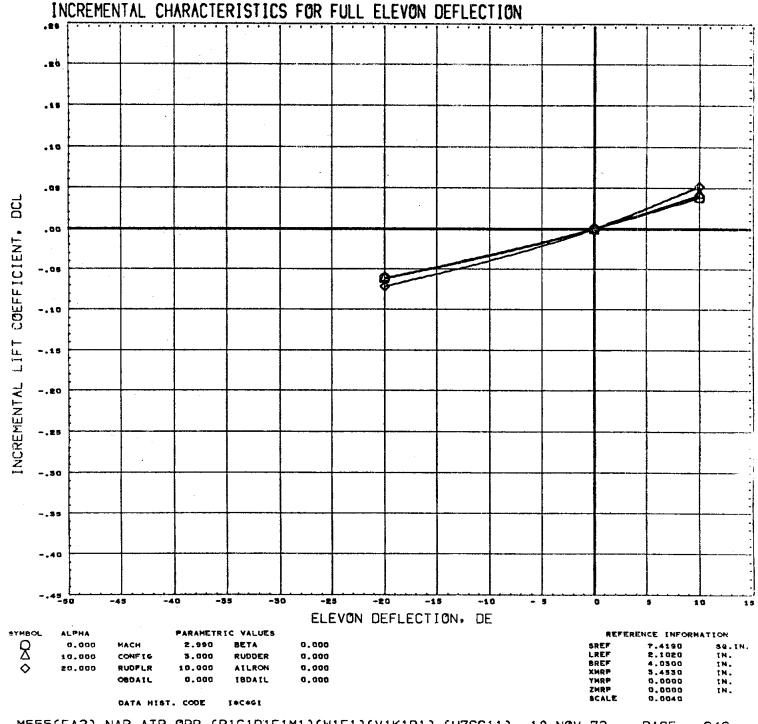




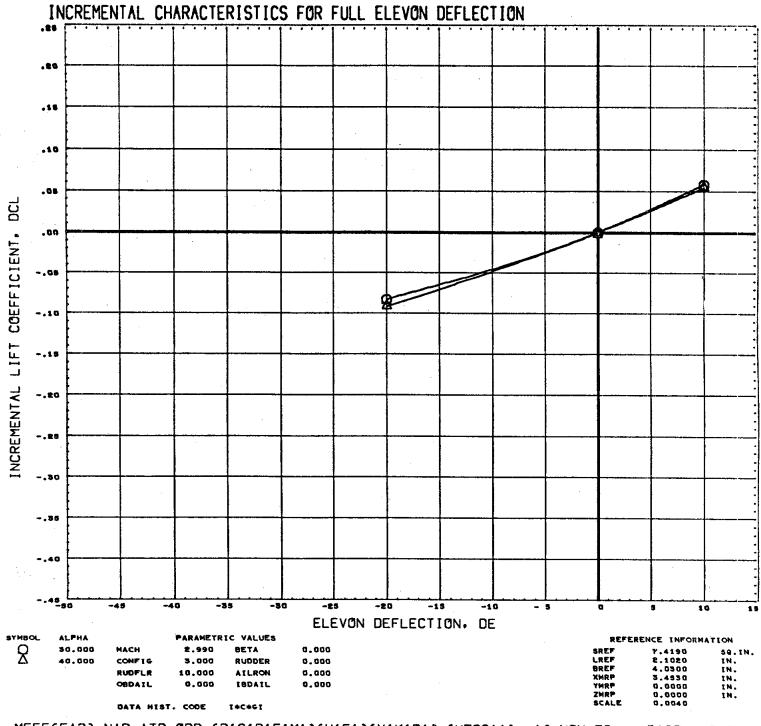
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (H76C11) 10 NOV 72 PAGE 644



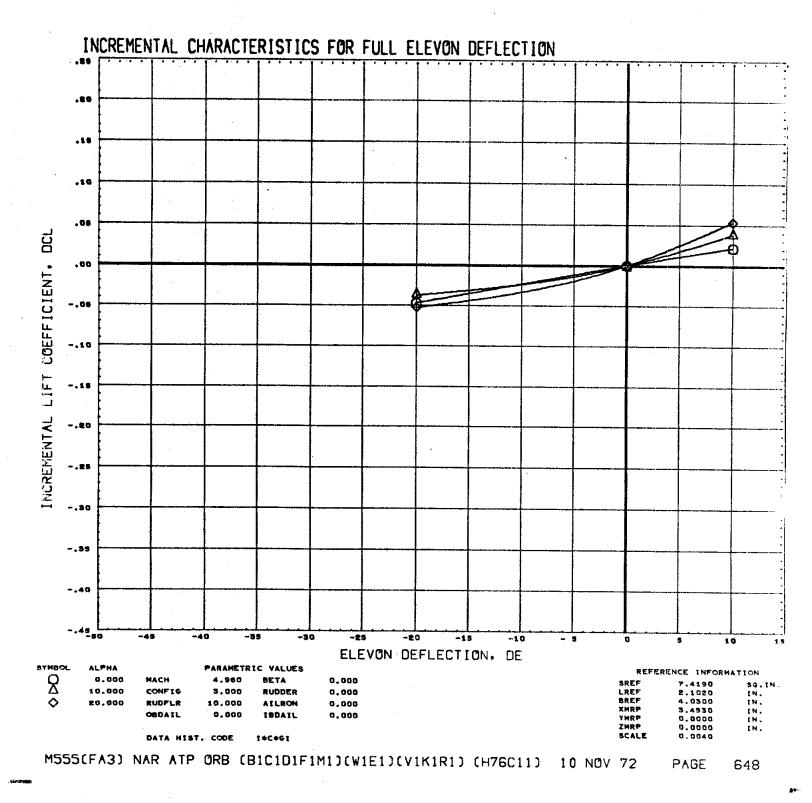
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (H76C11) 10 NOV 72 PAGE 645

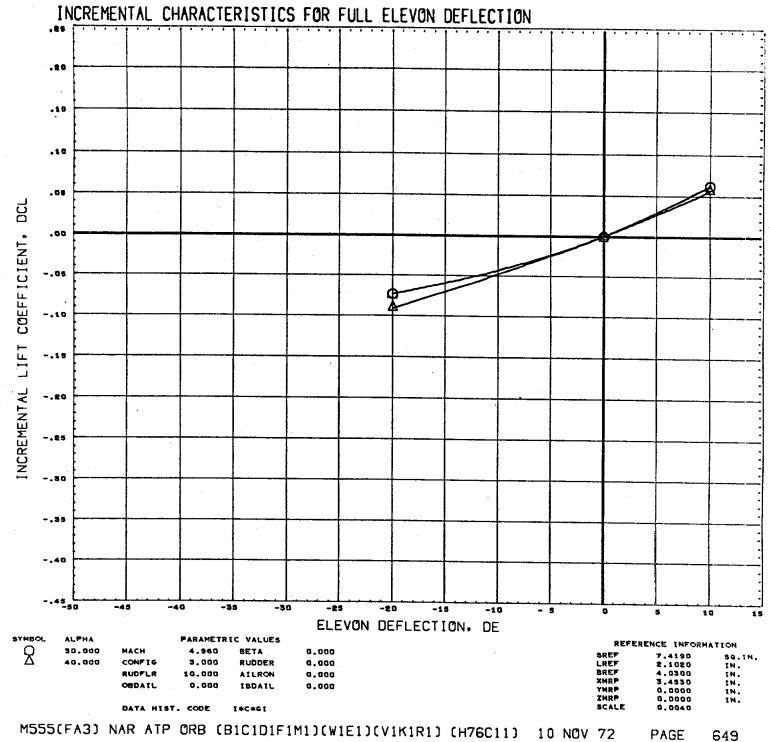


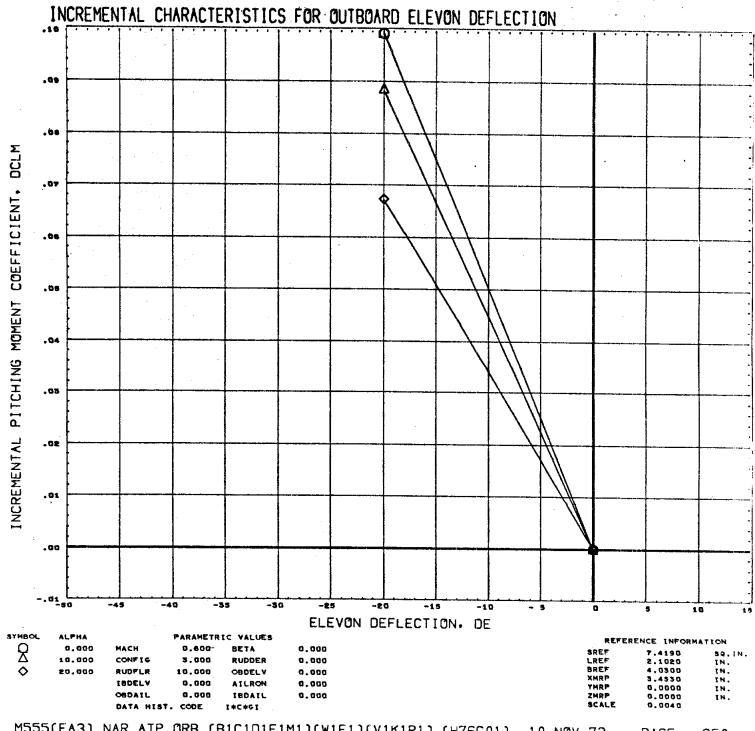
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (H76C11) 10 NOV 72 PAGE 646



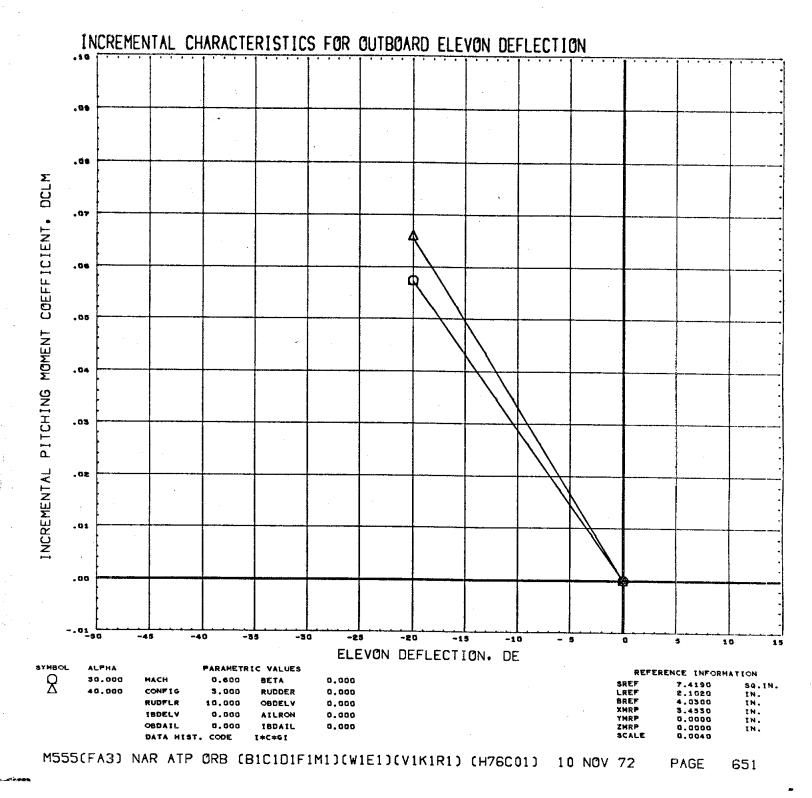
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (H76C11) 10 NOV 72 PAGE 647

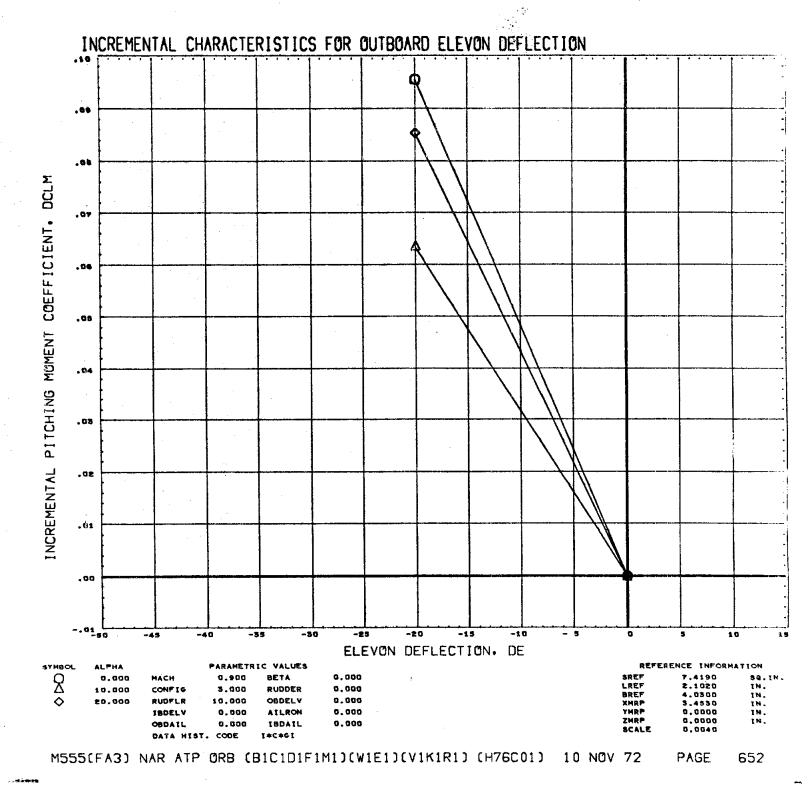


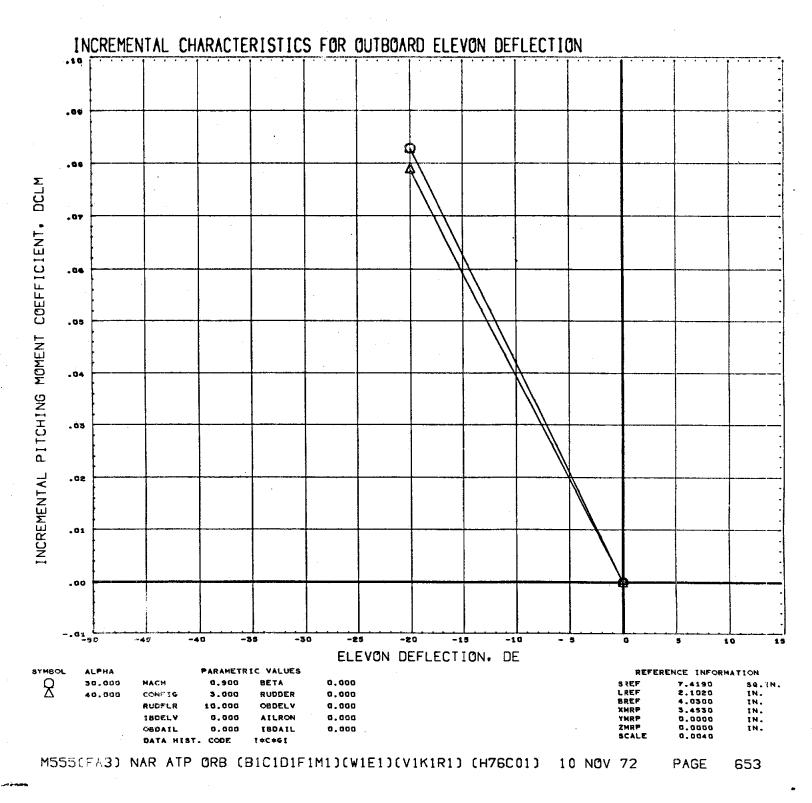


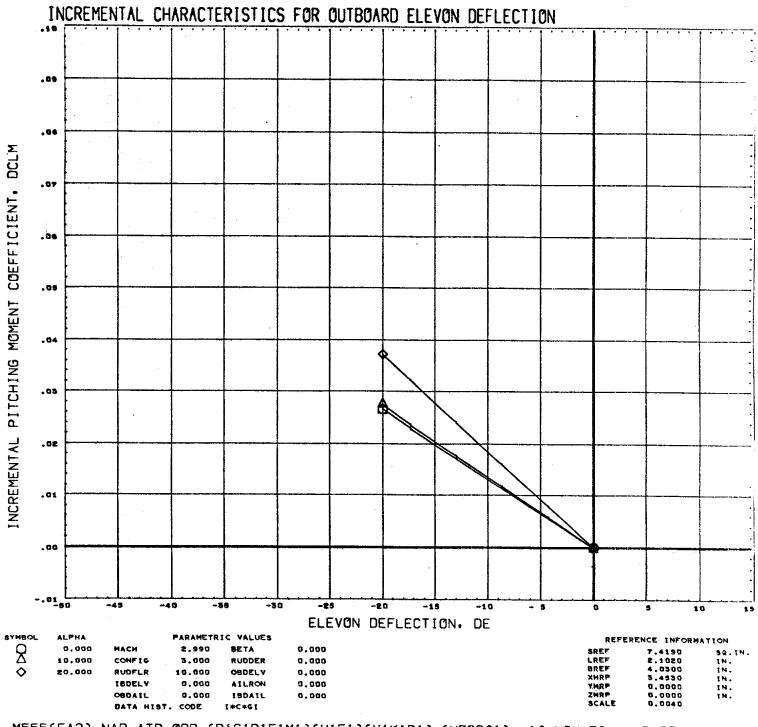


M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (H76C01) 10 NOV 72 PAGE 650

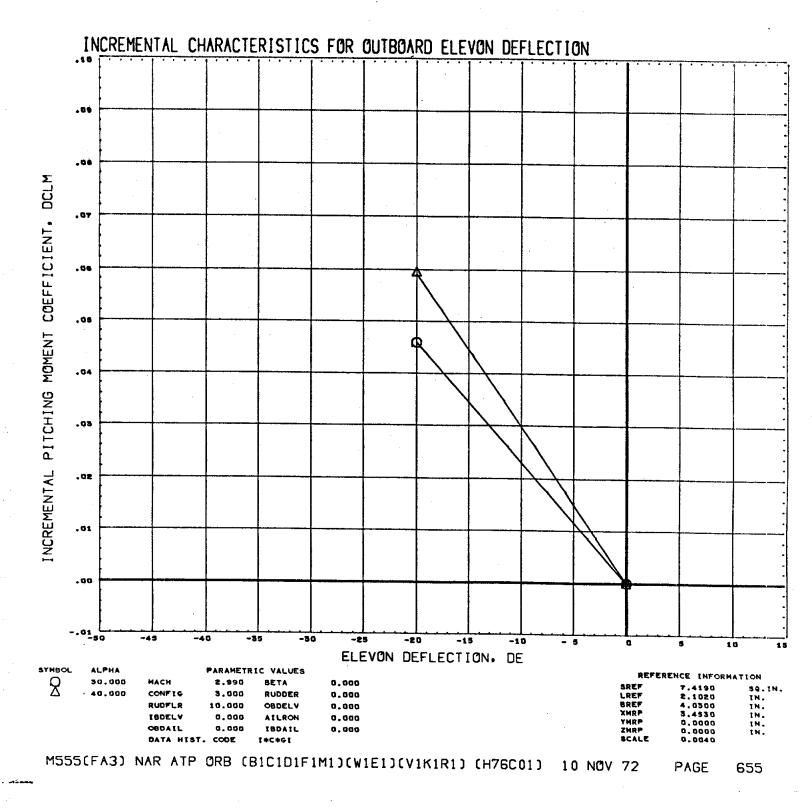


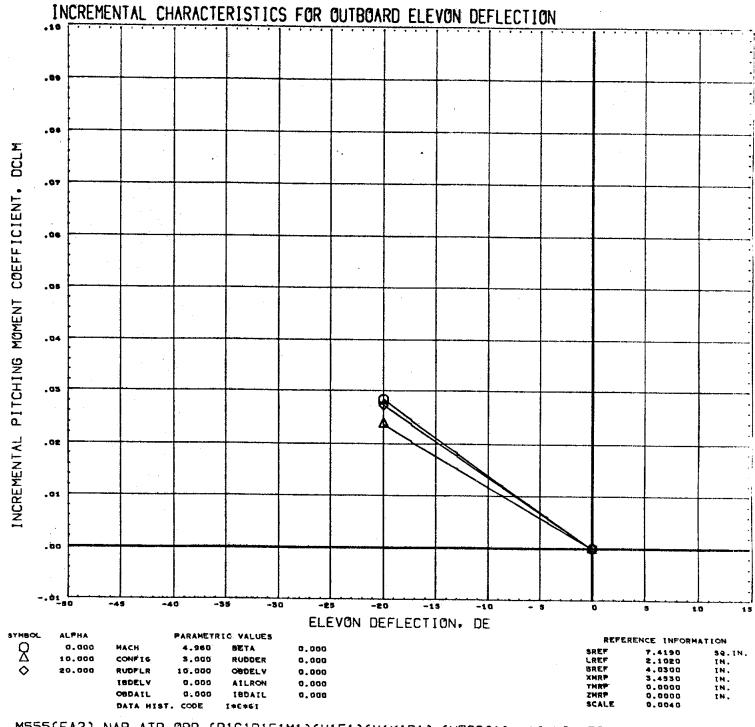




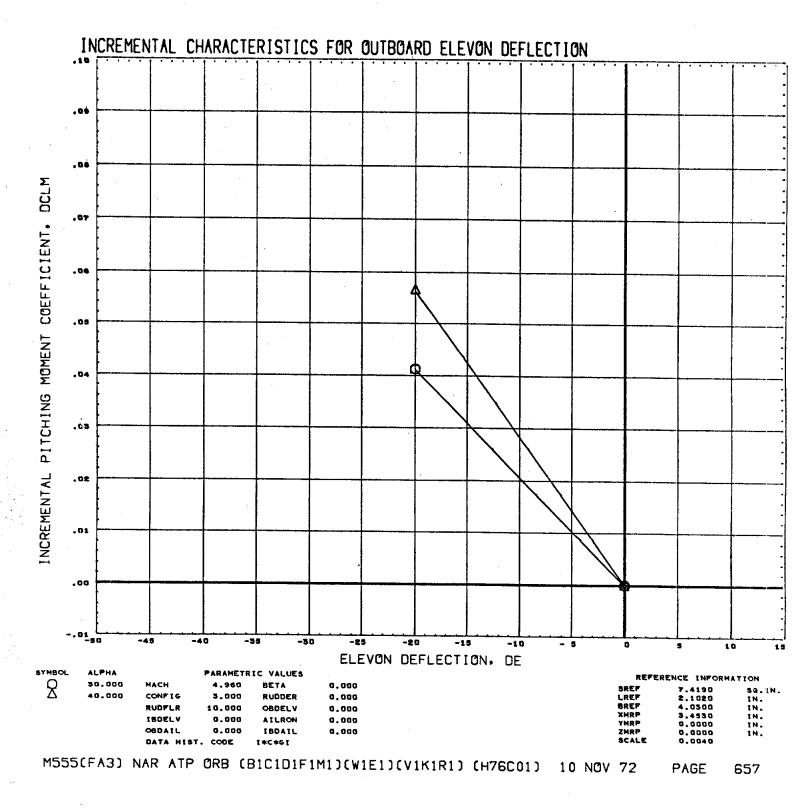


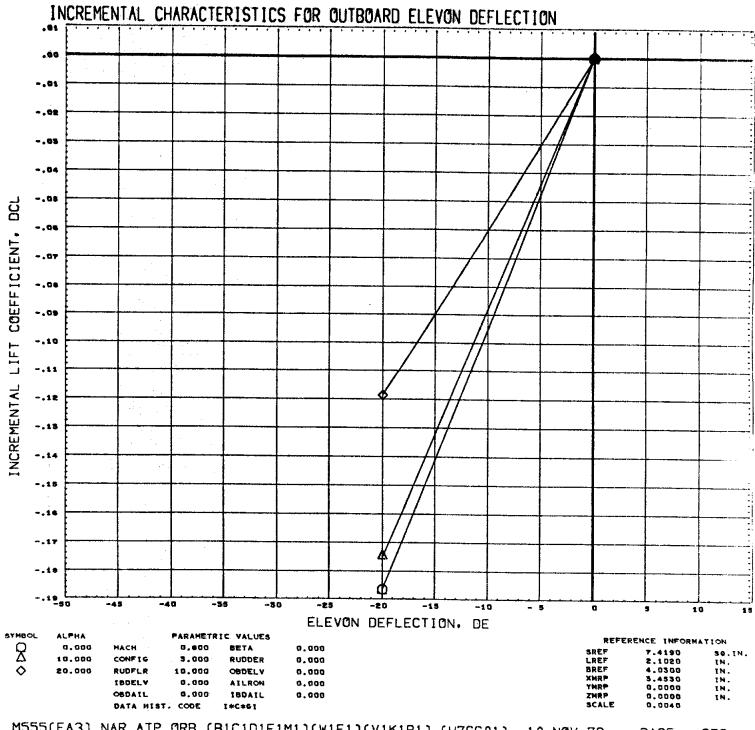
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (H76C01) 10 NOV 72 PAGE 654



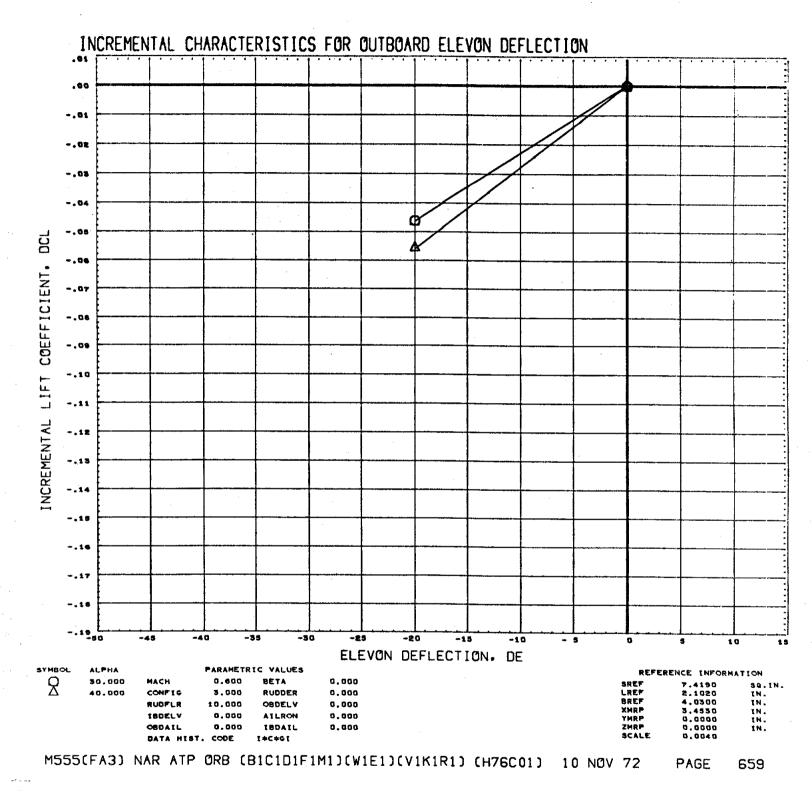


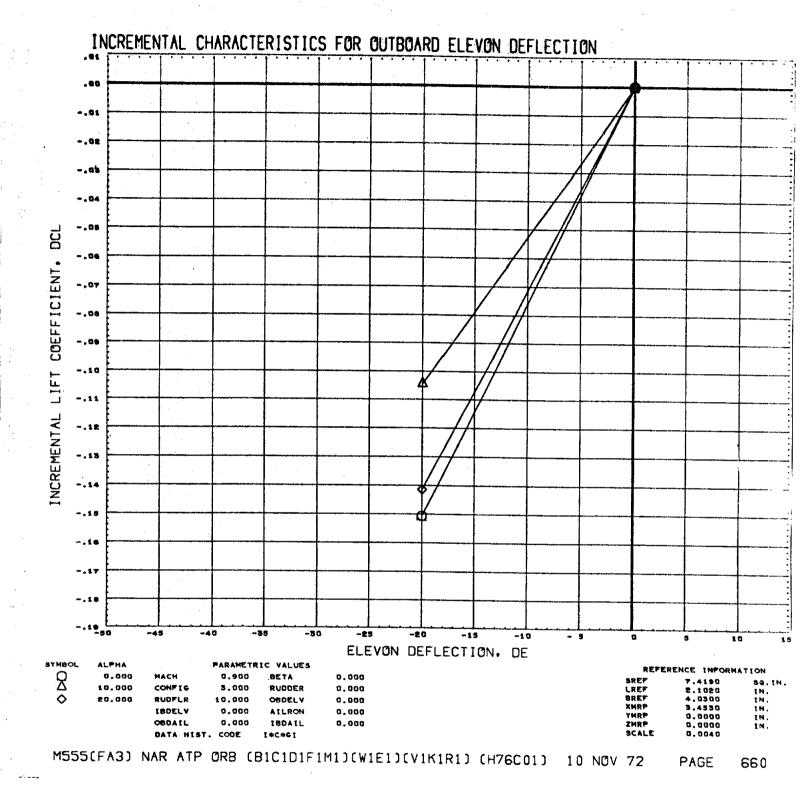
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (H76C01) 10 NOV 72 PAGE 656

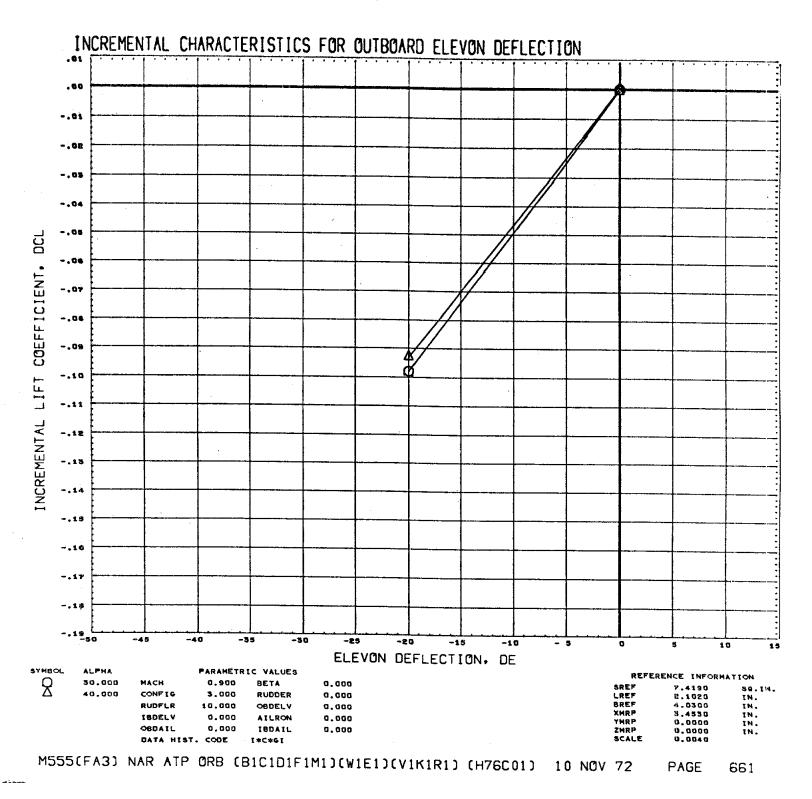


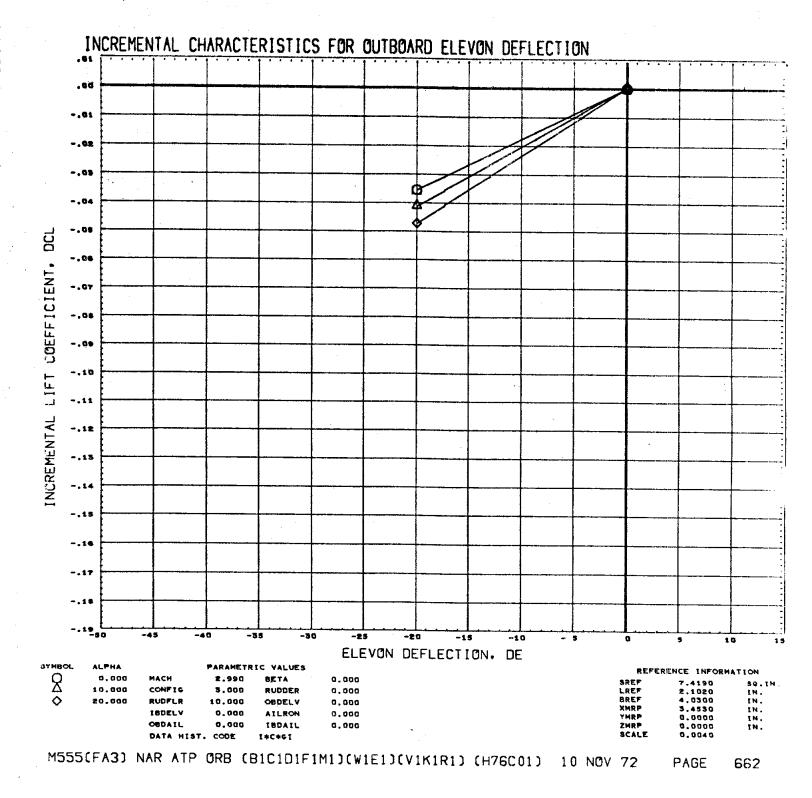


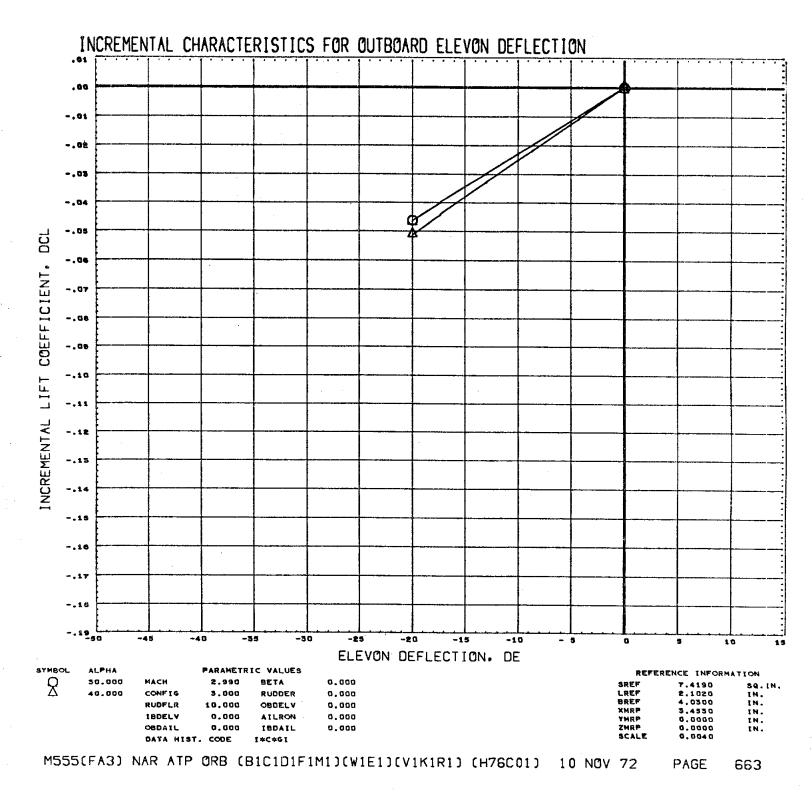
M555(FA3) NAR ATP ORB (B1C1D1F1M1)(W1E1)(V1K1R1) (H76C01) 10 NOV 72 PAGE 658

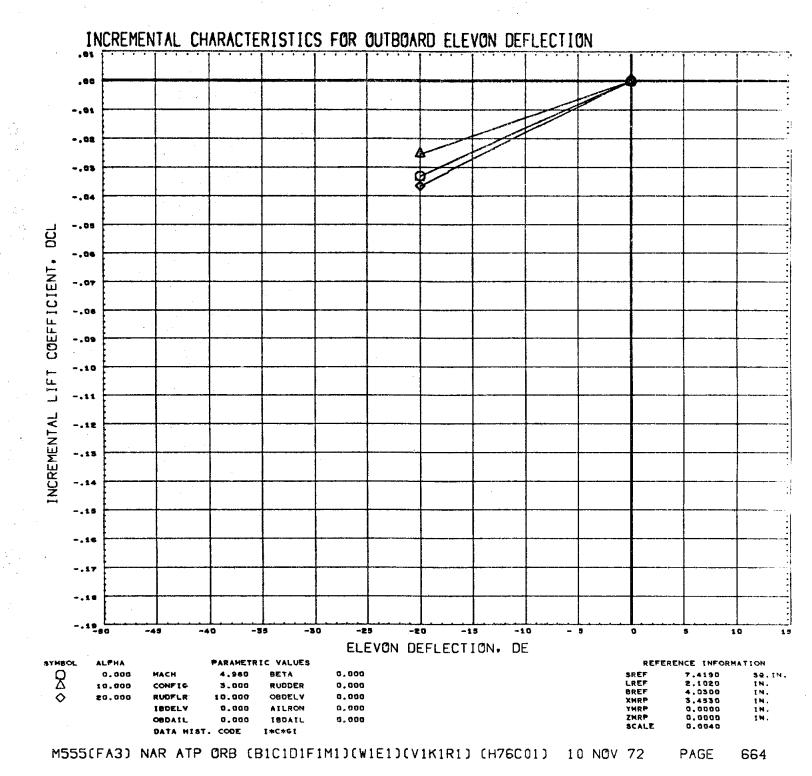


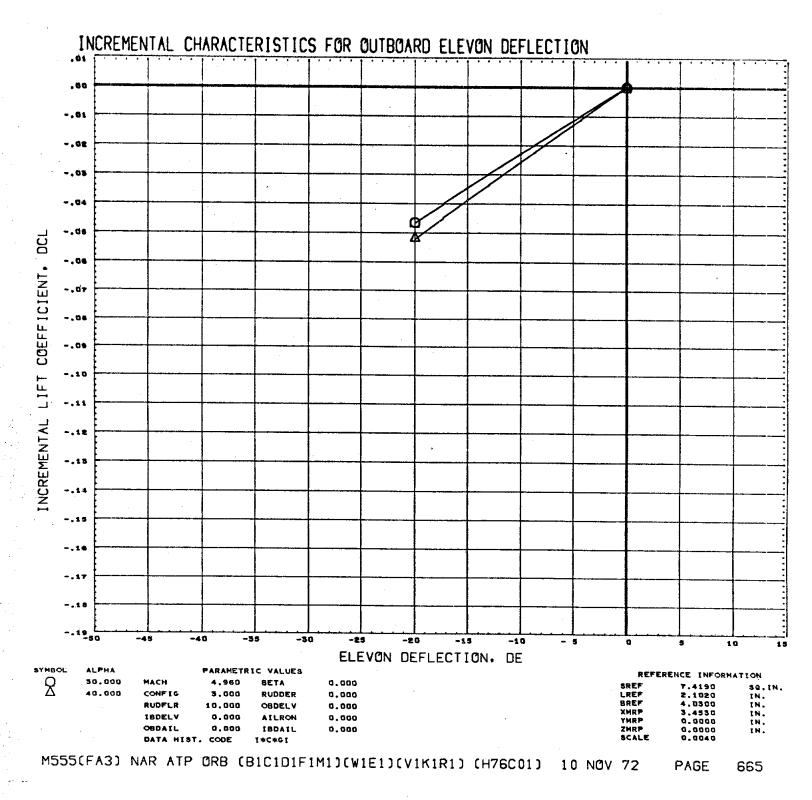


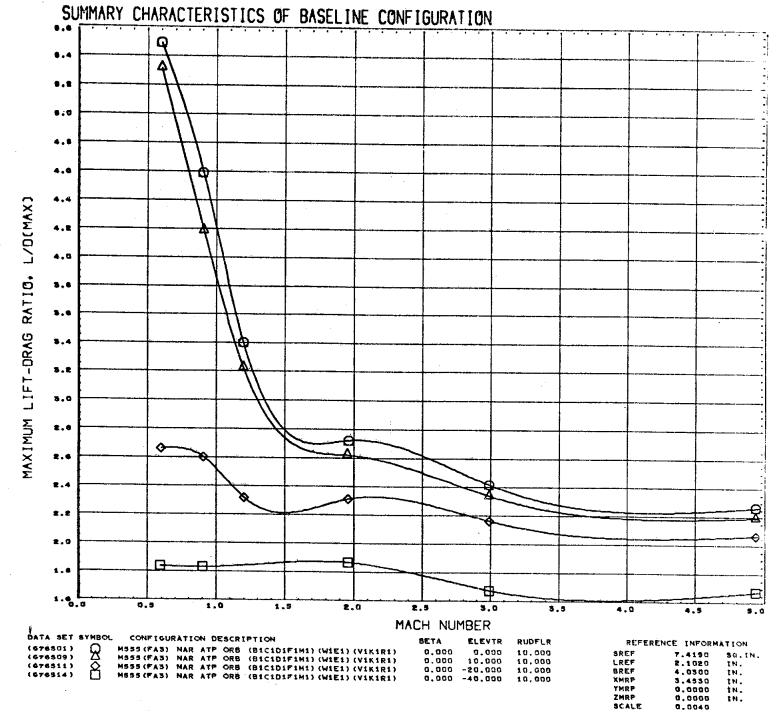


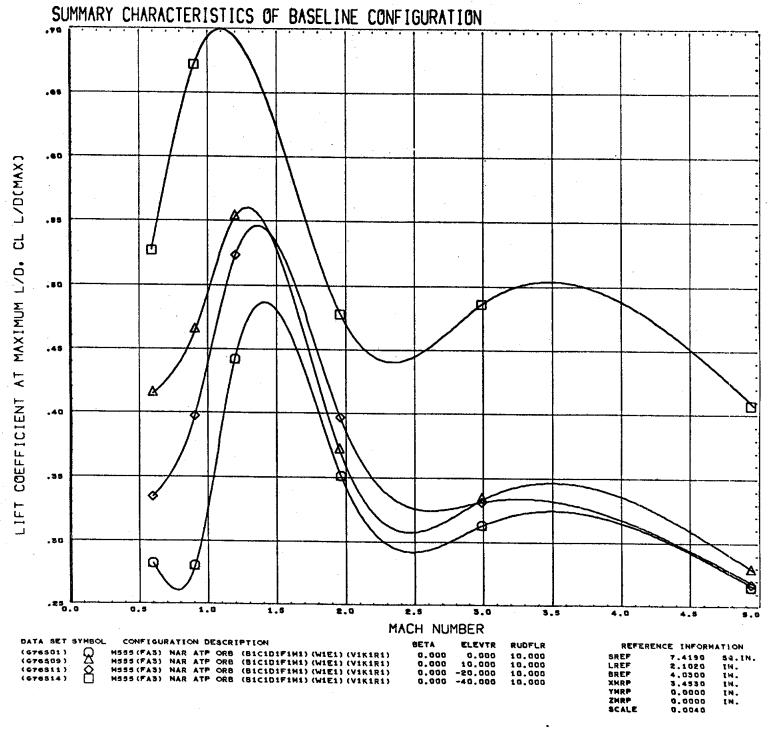












PAGE 667

APPENDIX

TABULATED SOURCE DATA LISTING

Tabulations of the plotted data are available from SADSAC Operations on request.

MSSS (FAS) NAR ATP ORB (BICIDIFINI)

(R76101) (03 NOV 72)

REFERENCE DATA

			*								
BREF =	7.4190 80	G.TH. WHEP	= 3.45	30 IN.				BETA =	.000	CONFIG =	1.000
LREP =	2,1020 1	N. YMRP	= .00	CO IN.					•		1,100
BREF W	4,0300 1	N. ZHRP	.00	00 IN.							
SCALE =	,0046						•				
•		RUN I	NO, 54/ 0	RN/L =	4,98 GR	ADIENT INTE	RVAL = -5.0	30/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	GO.	L/O
.597	Ø8 2.	02060	.00820	.00790	.00400	00010	.00330	.03080	02070	.00300	-6,73170
.597	2,500	00970	.01260	.00870	.00450	00010	,00440	.02940	00990	.00390	-2.51090
.397	4,610	.00200	.01630	.00870	.00460	00050	.00370	.02970	.00250	.00390	.63820
.597	4.450	.01450	.01950	.00820	.00450	00050	.00370	.02910	.01400	.00530	2.61600
.597	8,650	.02650	.02550	.01010	.00470	00050	.00260	.02920	,02760	.00690	4.00380
.597	10,670	.04270	.02920	.01120	.00460	00060	.00140	.02980	.04170	02600.	4.47360
.597	12,710	.05630	.03170	.01110	.00420	00080	00020	.03030	.05500	.01210	4.54030
.597	14.690	.07280	.03630	.01150	.00400	-,00070	00310	.03280	.07130	.01540	4.62230
.597	16.780	DeDe D .	.04000	.01100	.00360	~.00090	00600	.03520	.08880	.02040	4.34070
.597	18,780	.10700	.04410	.00970	.00360	- 00100	00980	.03750	.10450	.02510	4.15260
.597	20,680	.12520	.04750	.00770	.00360	~.00110	01230	.03880	,12150	.03270	3.71300
.597	10,670	.04090	.02920	.01120	.00420	00070	,00050	.03050	.04010	.00810	4.91480
	GRADIENT	.00596	.00206	.00020	.00015	00010	.00010	-,00028	.00591	.00023	1,87160
		RUN N	D. 53/0	RN/L =	6.30 CR/	ADIENT INTER	!VAL ≈ -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	60	L/O
.905	.660	02470	.00940	.00000	.00400	00020	.00760	.03370	02480	.00730	-3.39190
.905	2.580	01260	.01410	.00820	.00410	00030	.00730	.03400	01290	.00670	-1.91460
.905	4.630	.00146	.01930	.00950	.00430	00040	.00680	.03390	08000.	00000	.12930
.905	6.670	.01520	.02410	.01020	.00440	00050	.00650	.05310	.01430	.00820	1,73400
.905	8,700	.03010	.02790	.01030	.00410	00060	.00620	.03270	.02880	.01070	2.69290
.905	10.740	.04630	.05240	.01120	,00400	80070	.00490	.03330	.04450	.01340	3,30900
.905	12,790	.06500	.03810	.01160	.00400	00080	.00250	.03530	.06280	.01680	3.72800
.905	14.810	.08270	.04230	.01080	.00380	~.00100	.00010	.03670	.07990	.02120	3.75630
.905	16.930	.10560	.04990	.01060	.00360	00110	-,00140	.03890	.10140	.02930	3.45440
.905	18,960	.12680	.05720	.01100	.00360	00120	00450	.04120	,12140	.03890	3.28440
.905	20,910	.14720	.06430	.00810	.00350	00138	00620	.04360	.14050	.03690	3.13130
.905	10.740	.04760	.03300	.01120	.00390	00080	.00420	.03380	.04610	.01510	3.51990
	GRADIENT	.00658	.00249	.00038	.00008	00005	~.00020	.00005	.00645	00010	.88819
								•			.00013

HSSS (FAS) HAR ATP CR8 (B1C1D1F1H1)

(R76101) (03 NOV 72)

REFERENCE DATA

GREP &	7,4190 80 2,1020 IN			30 IN. 00 IN.				BETA =	.000	CONFIG =	1,000
BREF .	4,0300 (N	, ZHRP	.00	00 IN.							
SCALE =	.0040										
		RUN	NO. 92/0	RN/L =	6.69 GR	ADIENT INTER	10.6- = JAV	0/ 9,00			
MACH	ALPHA	CN	CLM .	CY	CYN	CBL	CAF	CAB'	CL.	CO CO	L/O
1,199	.640	01770	.00450	.00700	.00450	00020	.03420	.03850	01810	.03400	53290
1,199	2.590	~.00440	.00983	.00770	.00460	-,00030	.05346	.03860	-,00590	.03310	-,16000
1,199	4,630	.01150	.B1480	.00870	.00490	00030	.03160	.04080	00890	.03250	.27600
1,199	6,700	.02650	.01950	.00940	.00500	00050	.03020	.04230	.02310	.03310	.69790
1,199	9.750	.04390	.02500	.01030	.00510	00060	0e850,	.04380	.03960	.03520	1,10490
1,199	10,810	.06300	.03080	.01150	.00478	-,00080	00150.	.04550	.05670	.03930	1.44310
1,199	12,680	.08420	.03660	.01310	.00490	-,00110	.02640	.04810	.07620	.04450	1.71140
1,199	14,930	.10720	.04470	.01450	.00390	~,00130	.02500	.05090	.09720	.05180	1.67560
1,199	17,070	.13470	.05530	.01750	.00360	-,00140	.02320	.05210	.12190	.06180	1.97260
1,199	19,140	.16156	CBSSO.	.01780	.00330	-,00120	.02180	.05190	.14540	.07350	1.97590
1,199	21.140	,19090	.07760	.01910	.00300	-,00120	.01960	.05210	,17100	.08720	1.95990
1,199	10.610	.06370	.03130	.01190	.00490	~.00080	.02750	.04660	.05740	.03900	1.47340
	GRADIENT	.00732	.00258	.00043	.00010	00002	-,00065	.00058	.00677	-,00038	.20289
		RUN	NO. 96/ 0	mul *	7.02 GR	DIENT INTER		0/ 5,00			
MACH	ALPHA	CN	CL.M	CY	CYN	CBL	CAF	CAB	Q.	60	L/D
1,960	.610	02020	01300	.00760	.00580	00050	.04340	. 0 2000	02060	.04320	47860
1,960	2.570	00520	00620	.00840	.00360	00030	.04190	.01990	00710	.04160	17120
1.960	4,620	.00900	.00160	.00850	.00370	00030	.03920	,02230	.00580	.03980	.14690
1.960	6.710	.02580	COSOD.	.00980	.00370	00040	.03760	.02370	.02120	.04030	.52690
1.960	8.750	.04520	.01470	.01140	.00380	00050	.03610	.02500	.03920	.04260	.92080
1.960	10.830	.06890	,02020	.01310	.00580	00070	.03360	.02680	.06130	.04590	1.35450
1,960	12.930	.09560	.02580	.01560	.80340	00090	.03170	.02800	.00600	.05230	1,64250
1.960	15.000	.12180	.05070	.01730	.00290	00090	.02930	.02950	.11010	.05990	1.83760
1,960	17,150	.15270	.03750	.01890	.00230	00100	.02800	.03040	.13760	.07190	1.91400
1,960	19.210	.18100	.04760	.02020	.00120	00120	.02590	.03000	.16240	.08410	1,93010
1.960	21,190	.21000	.05580	.02200	.00070	-,00120	.02510	.02970	.18670	.09930	1.87840
1.960	10,630	.06960	.02100	.01380	.00376	00070	.05360	.02680	,86200	.04610	1,34550
	GRADIENT	.00728	.00369	.00022	00003	.00000	00105	.00058	.00658	00065	.15598

.00008

-.00103

-.00028

.00594

~.00095

.14037

MSSS (PAS) NAR ATP CRB (B1C1D1F1H1)

(R76101) (95 NOV 72)

REFERENCE D	

REFERENCE DATA					PARAMETRIC DATA						
SREF = LREF = BREF = SCALE =	7.4190 8 8.1020 1 4.0300 1	N. YMRI	* .0	530 th. 000 th. 000 th.				BETA #	.000	CONFIG =	1.000
	•	RUN	NO. 1/ 0	RN/L =	4.12 GR	ADIENT INTE	RVAL = -5.0	00/ 5,00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	_	
2.090	,640	02120	-,02210	.00560	.00250	00010	.04520	,01090	02170	CD.	L/O
2.490	2.550	00620	-,01470	.00650	.00250	00020	.04160	.01100	00800	.04490	48450
2,990	4.600	.01050	00690	.00670	.90250	00010	.04050	.01120		.04130	19460
2,990	6,650	.02650	00010	<i>00790</i>	.00220	-,00010	.03610	.01160	.00720 02190	.04130	.17590
2.990	6,670	.04720	.00550	08800.	.00220	-,00020	.03490	.01250	.04140	.04090	.53640
2.990	10,700	.06750	.01100	.00200	.00190	00040	.03210	.01520	.06040	.04170	.99400
2.990	12.760	.09060	.02000	.01060	.00160	00050	.02970	.01360	.08180	.04410	1,37020
2.990	14.780	.11520	.02710	.01840	.00130	00080	.02760	.01390		.04890	1.66960
2.990	16,670	.14100	.03460	.01130	.00090	-,00070	.02610	.01390	.10430	.05610	1.85740
2,990	18,680	.16830	.04320	.01180	.00080	00070	.02500		.12730	.06590	1.93060
2,990	20,640	.19550	.05060	.01200	.00070	00080	.02390	.01410	.15110	.07810	1.93460
2.990	10,700	.06960	.01190	.00870	.00220	00040	.03160	.01430	.17420	.09198	1.89390
	GRADIENT	.00801	.00364	.00028	.00000	.00000	00118	.01370	.06270	.04410	1.42300
					,	.40000	00116	.00008	.00730	,00090	.16689
		RUN	NO. 2/0	RNVL =	4,83 GRA	DIENT INTER	RVAL = -5.0	0/ 5,00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	Q.	œ	L/D
4.959	.660	02500	02490	.00560	.00200	.00050	.04230	,00270	02550	.04200	60820
4,959	2.550	01390	~.0 2020	.00490	.90180	.00060	.03860	.00290	01560	.03800	41200
4.959	4,590	.00080	01270	.00590	.00170	.00050	.03820	.00160	00220	.03820	05830
4.959	6,600	.01340	00950	.00530	.00140	.00040	.05590	.00220	.00920	.03720	05650
4.959	8,620	.02950	00090	.00740	.90110	.00050	.03260	.00250	.02420	.03660	
4,959	10.650	.04620	.00420	.00620	.00100	.00040	02930	.00280	.04000	.03740	.65770 1.06970
4,959	12.660	.06470	.01440	.00770	.00120	.00050	.02740	.00300	.05710	.04090	1.39490
4.959	14,680	.08500	.02060	.00800	.00000	.00030	.02590	.00310	.07570	.04660	
4.959	16,740	.11010	.02590	.00750	.00040	.00000	.02520	.00320	.09620	.05580	1.62320
4.959	18.740	.13180	.03320	.00740	.00050	.00030	.02480	.00340	.11680	.06590	1.75770
4,959	20,670	.15640	.04000	.00670	.00050	.00030	.02470	.00340	.13760	.07830	1.77180
	GRADIENT	.00657	.00311	.00008	~.00008	00000	00103	00028	00504	.0000	1.75610

MSSS (FAS) NAR ATP ORB (B1C101F1M1)

(RT6102) (85 NOV 72)

P. C.	ERCHCE	DATA

sate =	- 4100 0										
LREF =	7,4190 &			530 IN.				BETA =	.000	CONFIG =	1.000
SREF =	4,0300 1			000 IN.							
SCALE =		H. ZHRP	* .0	000 IN.							
OCALE -	.0040										
		RUN H	0, 44/0	RN/L =	4,97 GR	ADIENT INTER	RVAL = -5.0	0/ 5,00		· ·	
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	œ	L/D
.697	21,260	.12760	.04550	00420	.00570	-,00140	-,01170	.03770	.12320	,03530	3.46230
.597	23,160	.14550	.05090	00700	.00680	00170	01420	.03920	.13940	,04410	3.15740
.597	25,210	.16530	.05360	01230	,00780	-,00190	01650	.04070	.15660	.05530	2.82750
#597	27,240	.18740	.05920	01470	05600	-,00190	02140	.04470	.17650	.08880	
.597	29,260	,20710	.06290	-,01910	.01000	00210	02450	.04570	19270	.03980	2.64650
.597	31,300	.23150	.06780	02040	.01050	00200	05180	.05100	.21440	02800.	2.41410 2.30280
.597	33,330	.23640	,06960	02000	.01030	00190	03520	.05190	,23360	.11140	
.597	35.360	,27900	.07460	01540	.00980	00190	04080	.05500	.25110	.12010	2.09570
.597	37,430	,30620	.07780	01240	.00940	-,00160	04490	.05650	.27200	.15160	1.95970
.597	39,450	.33520	.06340	-,00460	.00810	00110	- 05090	.05950	.29120	.17370	1.79370
.597	41,400	.36350	.08460	.01410	.00620	00140	05420	,06030	.30850		1.67690
.597	51,290	.23070	.06700	02190	.01070	00200	03200	,06030	-	.19960	1.54520
****	GRADIENT	.01167	.00195	.00044	,0000e	.00002	00555	,00120	.21360	.09240	2.31290
				.000	,00000	,0000		,00120	•00929	.00803	09151
		RUN NO	o. 6 5/0	RN/L =	6,28 GR	ADIENT INTER	VAL = -5.00	3/ 5.00			
MACH	ALPHA	ØN .	CLM	CY	CYN	CBL	CAF	CAB	a.	0	L/0
.000	21.480	.15630	.06800	00140	.00580	00140	00520	.64200	.14730	.05240	2.81130
.950	23,420	.17560	.07740	00190	.00630	-,00140	00920	.04460	.16480	.06130	2.68790
.900	25.510	.20450	.08730	00140	.00650	00150	~.01250	.04660	.16960	.07670	2.47530
.960	27.590	.23210	DOCCO.	.00350	.00620	00180	01630	.04870	.21330	.09300	2,29250
.900	29.680	.26670	.11300	.01620	.00610	00230	01986	.05010	.24120	.11550	2.08820
.900	31.760	.30550	.12740	.02910	.00620	00260	02300	.05210	.27180	.14140	1,92260
.900	55.900	.35690	.14070	.04120	08300.	00240	02660	.05480	.31110	.17690	1.75800
.900	35.990	.41070	.14750	.04510	.00750	-,00200	02900	.05490	.34930	.21760	1.60340
.900	38.270	.50130	.16660	.07390	.00270	00230	03250	.05440	.41370	.28490	1.45200
.900	40.320	.53510	.18390	.08740	.00240	00260	03690	.05290	.43190	.31800	1.35790
.900	42.310	.96040	.20350	.09160	.00488	00270	04240	.06280	.44300	.34590	1.28050
.000	31.770	.30590	.12610	.02850	.00620	00260	02419	.05260	27280	.14050	1.94110
	GRADIENT	.02080	.00635	.00500	00014	00006	00169	.00027	01543	D1489	- 07400

MSSS (FAS) NAR ATP ORB (BICIDIFINE)

(876102) (03 Nov 20)

REFERENCE DATA

SREP =	7.4190 80,			30 IN.				BETA =	.000	CONFIG =	1.000
LREF =	\$,1020 TN.	-		000 IN.							
BREF .	4,0300 IN	ZHRP	* .0	000 IN.							
SCALE =	,0040		•								
	•										•
		RUN	NO. 8/0	RN/L =	4,12 GR	VOTENT INTER	WAL = -5.00	3/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	œ	L/D
2,990	21.360	.18960	.04930	.01360	.00050	00070	.02670	.01350	.16680	.09400	1,77430
2,990	23,310	.21900	.05620	.01250	.00030	00090	.02580	.01390	.19090	.11040	1.72860
2.990	25,380	.24910	.06620	.01270	.00070	00080	.02540	.01390	.21410	.12980	1.64980
2.990	27,440	.26190	.07400	0e010.	08000.	00090	.02490	.01400	.23870	.15210	1.56940
2.990	29,490	.31340	.00290	.00970	.00050	00090	.02410	.01410	.26090	.17530	1,48840
2.990	31.550	.34620	.09210	.00960	.00060	-,00100	.02350	.01410	.28270	.20120	1,40470
2.990	33.600	.38110	.10060	.00840	.00060	-,00110	.02270	.01420	.30480	.22980	1.32600
2,690	35.660	.41470	.10630	.00720	.00010	+.00120	.02190	.01420	.32410	.25960	1,24630
2.990	37.760	45120	.11610	.00800	.00000	00120	.02150	.01400	.34350	.29330	1,17090
2.990	39.790	.48620	.12370	.00490	00020	00130	.02100	.01380	.36010	.32740	1.09980
2.990	41.770	.51940	.13020	,00440	-,00040	00120	.02040	.01360	.37380	.36120	1,03470
	GRADIENT	.01621	.00404	00047	00004	00003	-,00031	.00000	.01026	.01314	03747
		RUN	NO. 10/1	RN/L #	4,83 GR	DIENT INTER	VAL = -5.00	3/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	ar	00	L/D
4.959	21,230	.16480	.04520	.00780	.00010	00030	.02780	De S00 .	.14350	.08560	1.67590
4.959	23,160	.19070	.05260	.00710	.00030	00050	.02760	.00300	.16440	.10060	1.63360
4.959	25,180	.21940	.06060	.00580	.00030	00020	.02890	.00190	,18620	.11960	1.55740
4.959	27.210	.24830	.08880	.00570	.00010	00070	.02890	.00240	.20750	13930	1.48930
4.959	29,240	.27840	.07560	.00440	.00010	00060	.02830	.00260	.22910	.16070	1.42520
4.959	31.280	.51090	.08510	.00540	-,00010	00050	.02760	.00280	.25140	.18510	1.35800
4.959	55.550	.34580	.09170	.00410	00070	-,00070	.02780	.00280	.27360	.21330	1,28250
4.959	35,340	.37650	.10050	.00450	00040	00070	.02750	.00270	,29120	.24030	1.21170
4.959	37,410	.41230	.10720	.00320	00050	~.00080	.02720	.00260	.31090	.27210	1.14240
4.959	39,420	.44500	.11430	,00510	-,00060	00090	.02710	.00270	.32640	.30360	1,07510
4.959	41.370	.47670	.11890	.00180	00090	00080	.02690	.00260	.33990	.33530	1.01350
	GRADIENT	.01562	.00375	00025	00006	~.00003	-,00007	.00000	.00995	.01245	03362

MSSS (FAS) HAR ATP ORB (BICIDIFIMI)

(R76103) (03 NOV 72)

REFERENCE	DAT	ľA

1827 ·	7.4190 80.			330 IN.				BETA =	.000	CONFIG 8	1.000
LREF =	2.1020 IN			900 IN.							
BREF =	4,0300 IN.	ZHRP	= .00	300 IN.							
SCALE =	.0040										
		RUN N	D. 205/ 0	MH/L =	4,15 GR	ADIENT INTE	RVAL = -5.0	00/ 5,00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	œ	L/0
2.990	41.550	.50560	.13040	,00400	00090	00090	De050.	,01240	.36470	.35110	1,03890
2,990	43,460	.53820	.13740	.00460	00100	00100	.02030	.01240	.37660	.38500	.97820
2.990	45,500	.57270	.14250	.00340	00100	00110	.01930	.01240	.38750	.42210	.91810
2,990	47,560	.60520	.14900	.00430	00070	00110	.01910	.01200	.39420	.45950	.85790
2.000	49,590	08858.	.15260	.00350	00100	00120	.01840	.01160	.39990	.49840	.80240
2.990	51.620	.66920	.15720	.00370	00110	00120	.01800	.01130	.40130	.53590	.74680
2.990	93.660	.70120	.16150	.00330	08000	00130	.01700	01120	.40170	.57490	.69870
086.5	55.670	.73140	.16530	.00390	00070	-,00120	.01590	.01090	.39920	.61300	.65120
2,990	57,740	.76220	.16760	.00280	-,00090	00140	.01510	.01070	.39400	.65260	.60360
2.990	59.770	.76920	.17040	.00370	00090	00140	.01410	.01020	.38510	.68890	.55900
2.990	61,670	.61110	.17160	.00300	000 90	00140	.01300	.01000	.37340	.72020	.51850
	GRADIENT	.01531	.00204	00005	00000	00002	00038	00013	.00049	.01855	02574
		RUN N	D. 206/ 0	RN/L =	4.90 GRA	DIENT INTER	VAL = -5.0	0/ 5,00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL,	CAF	CAB	CL.	CD.	L/b
4,959	41.250	.46450	11960	G9500.	00070	00100	.02850	.00140	.33030	.32770	1.00780
4,959	43,170	.49790	.12620	.00460	00050	00100	.02820	.00170	.34370	.36130	,95130
4.959	45.200	.53030	.13230	.00500	~.00050	00110	.02770	.00180	.35400	.39560	.89440
4.959	47.240	.56570	.13730	.00540	00070	00110	.02690	.00160	.36420	.43360	.63990
4.959	49.260	.59690	.14240	.00480	00050	00130	.02650	.00140	.36940	.46960	.78660
4,959	51.200	.62940	.14650	.00520	~,00060	00120	.02560	.00120	.37360	.50710	.73670
4.959	53,300	.66210	.15020	.00510	00650	00130	.02500	.00100	.37560	.54590	.68810
4,959	55.310	.69190	.15160	.00560	000000	-,00140	.02430	.00000	.37370	.58280	.64120
4.959	57.350	.72360	.16330	.00380	-,00080	-,00140	00880.	.00070	37090	.62170	.59660
4.959	59.350	.75300	.15740	.00460	00060	-,00140	.02210	.00050	.36470	.65910	.55340
4,959	61.260	.77850	.15830	.00530	+.00040	00150	.02060	.00050	.35580	.69270	.51370
	GRADIENT	.01975	.00189	.00003	~,00000	00003	00038	00007	.00130	,01837	02461

MSSS (FAS) MAR ATP ORB (B1C1D1F1H1)

(R76104) (63 NOV V2)

REFERENCE DATA

					PARAPETRIC DATA						
GREF H	7.4190 80 2,1020 IF			530 IN. 600 IN.				ALPHA =	.000	CONFIG =	1.000
BREF =	4.0300 11			000 IN.		•					

		RUN	NO. 65/ 0	RN/L =	4,96 GR	שופוז ואדפו	RVAL = -5.0	0/ 5.00			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	α.	c o	L/O
.595	-10.000	~.01630	.00560	.05690	.02460	00200	.00510	.02910	01830	.00520	-3,52160
.595	-0.150	01665	.00610	.04430	.01960	00180	.00460	.02990	01880	.00490	-3.84320
.595	-6.090	01790	.00870	.03360	.01500	00130	.00500	02990	-,01790	.00510	-5.48670
.595	-4,060	01930	.00920	.02170	.00990	-,60090	.00410	.03040	01930	.00420	-4,59260
.595	-2.030	01910	assop,	.01210	.00560	00070	.00470	.02940	01900	.00480	-3.97190
.595	.000	01950	.00000	.00250	00000	~,00030	.00360	.03030	01920	.00370	-5.15570
.595	8.020	01670	.01030	-,00700	-,00430	.00020	.00200	.03140	01670	,00210	-7.95290
.595	4.050	01750	.01000	01730	00950	.00060	.00140	.03210	01750	.00150	.00000
.595	6.138	01750	.01040	02970	01410	.00110	.00120	.03310	01730	,00120	.00000
.595	8,140	01720	.01180	04190	01690	.00150	.000070	.03360	01720	.00080	.00000
.595	10.070	01670	.01140	05640	+.02530	.00170	.00070	.03410	-,01670	.00070	.00000
.895	.000	01830	.00940	.00250	.00060	00030	.00410	.02960	01830	.00420	-4,32730
	GRADIENT	.00030	.00015	-,00479	-,00240	.00019	00040	.00027	.00029	00040	.25695
		RUN I	40. 66/ 0	RN/L =	6.29 GR	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA	CN	QTW.	CY	CYN	CBL	CAF	CAB	Q.	Ф	L/0
.900	-10,220	02290	.00790	.06720	.02710	00230	.00790	.03330	02290	.00800	-2.84820
.900	-6.270	~.02240	.01000	.05240	.02210	00190	.00890	.03250	02240	,00900	-2.48150
.900	-6,180	02100	.01040	.03730	.01620	~.00150	.00930	.03250	02100	.00940	-2.22390
.900	-4.120	02170	.01220	.02450	.01080	0009 0	.00900	.03220	~.02170	.00900	-2.36900
.900	-2.060	02230	.01250	.01310	.00540	~.00050	.00850	.03290	02230	.90860	÷2.59990
.eda	.000	02150	.01270	.00220	.00030	00020	.00720	.03290	02150	.00720	~2.95970
one.	2.050	02030	.01270	00880	00500	.00020	.00590	.03410	02030	.00600	-3.38380
.900	4,100	02000	.01270	02000	~.00960	.00070	.08460	.03550	02000	.00470	~4.23280
.900	6,210	01990	.01350	03290	01520	.00130	.00440	.03660	01990	.00440	-4.47440
.900	6,250	01960	.01230	04800	02050	.00170	.00490	.03670	01960	.00500	-3,92790
.900	10.250	01970	.01290	06510	02590	.00220	.00410	.03700	01970	.00410	-4.7399D
.900	.000	~.02150	.01270	.00120	.00000	00020	.00820	.03240	02150	.00830	-2.58120
	GRADIENT	.00026	.00006	00540	00251	.00019	00055	.00038	.00026	00054	21753

.000

GRADIENT

-.01560

,00008

-.01090

.00017

.00000

-,00687

.00010

-.00297

DATE 18 NOW TE MSFC TWT 999 PAGE

HSSS (FAS) HAR ATP ORB (BICIDIFIHI)

(R76104) (03 NOV 98)

	REFEREN	CE DATA			:				PARAJETRIC	DATA	
SREP = LREP = BAEP = SCALE =	7,4190 50 8,1020 IN 4,0300 IN ,0040	. YHRP	± .00	30 IN. 00 IN. 00 IN.				ALPHA =	.500	CONFIG =	1.000
		RUN	NO. 67/ 0	RN/L =	6.68 GRA	DIENT INTER	VAL = -5,00	0/ 5.00		-	
MACH	BETA	CN	GTH .	CY	CYN	CBL	CAF	CAB	C/L	œ	L/D
1,199	-10,380	01560	-,00110	.07420	.03240	00230	.03700	.03960	01550	,03710	41990
1.199	-6.370	-,01600	.00000	.05580	.02590	00180	.03710	.03830	01590	.03720	42820
1,109	-6,250	01530	.00200	.05890	.01930	00130	.03720	.03720	01520	.03730	~.40750
1,199	-4,160	01570	,00420	.02420	.01260	00100	.03690	.03700	01560	.03700	42260
1.199	-2.000	01610	.00560	.01220	00800,	-,00050	.03540	.03770	01600	.03540	45210
1,199	.000	-,01560	,00550	.00100	.00000	-,00010	.03340	03910	-,01550	.03350	46300
1.199	2.070	01500	.00590	-,01060	~,00630	.00000	.03130	.04180	-,01490	.03130	~.47780
1,199	4.150	-,01470	.00610	02330	01210	.00000	.03120	.04290	-,01460	.03130	4677D
1.199	0.290	01360	.00550	03860	-,01880	.00130	.03090	.04420	01350	.03090	··.43850
1.199	6,350	01350	.00450	-,05650	-,02490	.00160	.03040	,04570	01340	.03040	44060
1,199	10,360	01230	.00350	07810	05130	.00240	.02980	.04750	01220	.02960	40940
1.199	.000	01560	.00590	.00080	-,00640	.00000	.03310	.03960	01550	.03320	46740
	GRADIENT	.00015	.00020	00568	-,00299	.00021	00075	,00077	.00015	00075	00556
		RUN	NO. 99/ G	RN/L =	7.18 GRA	DIENT INTER	RVAL = -5.00	0/ 5.00			
MACH	BETA	CN	CLM	CY	CYN	CBL.	CAF	CAB	a.	69	L/O
1,959	-10,460	01420	01760	.09330	.03060	~.00250	.04530	.02350	01400	.04530	~,30930
1.959	-6.450	81400	01670	.06920	.02520	00200	.04490	.02250	01390	.04500	30930
1,959	-6.310	01460	01440	.04770	.01910	00140	.04490	.02130	01440	.04490	32140
1,959	-4,180	01450	01320	.02960	.01310	0000 9 0	.84410	.02050	01420	.04420	~.32160
1,959	-2.100	01520	01180	.01460	.00700	,00040	.84340	.02000	01510	.04350	34700
1,959	000.	~.01570	01090	00000.	.00060	.00000	,04160	.02150	01560	.04160	37520
1,959	2,100	01440	01090	01300	-,00550	.00070	.04080	.02320	~.01420	.04080	34920
1.959	4,190	01390	01190	02840	01170	.00110	.04140	.02400	01360	.04140	- .33 350
1,959	6,340	-,01240	~.01210	-,04650	01770	.00170	.04120	.02480	01230	.04120	29840
1.959	8,420	01180	01370	06970	02360	.00550	.04210	.02530	-,01160	.04220	~.27650
1,959	10,490	01100	01590	-,09450	-,02920	.00270	.04270	.02670	01090	.04280	-,25470

,00010

.00024

.02200

.00049

-.01540

.00008

.04050

-.00036

.04060

-.00040

-,38040

-.00124

MSSS (FAS) WAR ATP CRB (BICIDIFINI)

(R76105) 1 03 NOV 72 1

REFERENCE DATA

.00034

-.00029

.00012

.00026

-.00023

.08208

NO EXENCE DATA					PARAMETRIC DAYA						
BAEF a BAEF a	7.4190 80, 8,1020 IN. 4,0300 IN.	YHRP		1530 IN. 1000 IN. 1000 IN.				ALPHA =	10,000	CONFIG =	1.000
MCALE =	.0040		•								
		RUN	NO. 49/ (RN/L *	4.96 GR	ADIENT INTE	RVAL = -5.0	00/ 5.00			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	ar.	CO	L/D
.596	-10,120	.05180	.03490	.08280	.02550	-,00320	.00000	.03230	.05090	.00960	5,26140
.596	-8,170	.05250	.03270	.06240	.02050	00290	00000	.03110	.05140	.01070	4.60250
.595	-6.110	.05310	.03350	.04660	.01560	00210	.00200	.02990	.05180	.01180	4.37780
.596	-4.050	.05270	.03200	.02690	.01070	00160	.00170	.02980	.05150	.01150	4.47110
.596	-2.040	.05246	.02390	.01450	.00590	00060	.00050	.02990	.05130	.01020	5.02120
.396	010	.05480	.03670	.00340	.00190	-,00040	~.00050	.03120	.05390	.00960	5.61870
.596	\$,020	.05380	.03460	~.01010	00350	.00020	,00000	.03030	.05290	.01000	5.29030
.596	4.050	.05620	.03570	02130	00740	.00080	00050	,03080	.05530	00000	5,56350
.596	6.130	05690	.03510	-,03630	01210	.00150	~.00048	.03080	.05600	.01010	5,53420
.596	8,150	.05600	.03610	05340	01730	.00210	~.00030	.03090	.05510	.01000	5.48090
.596	10,110	.05540	.03740	07330	05550	.00260	00210	.03360	.05490	.00810	6.73410
.596	.000	.05400	.03320	.00170	.00100	-,00050	.00040	.03020	.05300	.01040	9.08250
	GRADIENT	.00041	.00041	~.00617	00225	.00029	00024	.00012	.00045	00017	.12101
		RUN 1	NO. 50/ 0	RN/L =	6.28 GR	WIENT INTER	WAL = -5.0	0/ 5.00			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	α.	c o	
.902	-10.340	.05000	.03910	.10170	.03000	00340	.00320	,03630	.04850	.01250	L/0
.902	-8.340	.05140	.03750	.07840	.02370	00290	.00450	,03560	.04960	.01400	3.65700
.902	-6,230	.05500	.03750	.05320	.01750	00230	.00490	.03490	.05310	.01510	3,52700
S08.	-4.130	.05460	.03510	.03590	.01200	00160	.00480	.03430	.05270		3.50090
.902	-2.080	.05620	.03750	.01690	.00670	00110	.00470	.03350	.05430	.01490 .01510	3.52270
.902	010	.05670	.03770	,00140	.00120	00040	.00300	.03480	.05520	.01350	3.58310
.902	2.070	.05720	.03820	01200	00390	.00030	.00260	.03510	.05570	.01330	4.06960
.902	4.110	.05630	.03740	~.02630	00880	.00100	.00290	.03470	.05470		4,18680
.902	6.230	.05590	.03760	04630	01430	.00170	,00340	.03400	.05430	,01340	4.06660
.902	8,290	.05460	.03910	07080	02050	.00230	.00200	.03740	.05330	.01380 .01210	3,92370
.902	10.300	.05210	.04280	09510	02680	.00290	.00010	.03900	.05110		4.37250
.902	010	.05510	.03820	.00210	.00130	00020	.00260	.03460	.05360	.00980 .01280	5.17360
	GRADIENT	.00021	.00026	00743	00253	.00034	00029	00000	00000	.01260	4.16086

MSSS (FAS) HAR ATP CRB (B1C1D1F1H1)

(R76105) (03 NOV 72)

REFERENCE DATA

									PARAME IN L	DATA	
BREF E BREF E	7,4190 & 2,1020 H 4,0300 H	N. YMRI	P *	4930 IN. 0000 IN.				ALPHA =	10,000	CONFIG =	1,000
SCALE .	.0040	2980	• •	0000 IN.							
		RUN	NO. 51/	B RN/L =	6,68 GR	ADIENT INTER	RVAL = -5,8	30/ 5.0 0		·	
MACH	AT36	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	60	
1,197	-10,490	.07490	,04230	.10990	.03310	00330	.02680	.04630	.06850	.04050	L/D 1.69210
1.197	-6.460	.07550	.04010	.08250	02050.	-,00290	.02850	.04520	.06860	.04180	
1,197	-6.320	.07260	.03740	.05830	.02000	00240	.02930	.04540	.06570	.04240	1.59310
1.197	-4.200	.07170	.03570	.03710	.01330	00180	.02880	.04590	.06500	.04180	1.55480
1.197	-2.110	.07160	.03470	.01860	.00740	00120	.02850	.04610	,06490	.04150	1.55480
1,197	010	.06920	.03600	.00160	.00160	00020	.02770	.04580	.06280	,04020	1.56090
1,197	2,100	.07070	.03660	01620	00460	.00050	.02760	.04610	,06420	.04040	1.58690
1,197	4,170	.07200	.03690	03420	01030	.00130	.02790	.04600	.06540	.04100	1,59560
1,197	6,320	.07410	.03990	05530	01710	.00190	.02800	.04710	.06750	.04150	1.62580
1,197	8.450	.07590	,04310	07950	02400	.00250	.02670	.04790	.06950	.04060	1,71240
1,197	10,440	.08000	.04650	-,10720	03040	.00300	.02450	.04900	.07390	.03920	1.88480
1,197	,000	.06900	.03560	.00000	.00110	00030	.02780	.04520	.06260	.04030	1.55350
	GRADIENT	00001	.00022	00847	00283	.00038	-,00013	.00001	.00000	00013	.00495
		RUN	NO ₃ 97/0	RN/L =	7.02 GR	WIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA	C)N	CLM	CY	CYN	CBL	CAF	CAB	α.	Ф	L/0
1.961	~10.530	.08900	.02160	.12700	.02650	00340	.03350	.02810	.08110	.04980	1.62810
1.961	-8.520	.08620	.02120	.09890	.02220	00280	.03330	.02840	.07840	,04900	1.60020
1.961	-6.370	.08490	.02070	.07100	.01720	+.00220	.03440	.02790	.07680	.04980	1,54270
1.961	~4.250	.08270	.02040	.04610	.01180	00170	.03370	,02790	.07460	.04870	1.53750
1.961	-2.130	.08030	.02040	.02400	.00650	00110	.03270	.02790	.07270	.04720	1.53860
1,961	010	.07920	.02240	.00260	.00100	00040	.03280	.02620	.07160	.04710	1.51960
1.961	2,120	.08130	.02300	01940	~.00440	.00060	.03350	.02560	.07350	.04820	1.52430
1.961	4.210	.08310	.02400	04120	00950	.00120	.03350	.02650	.07520	.04860	1.54860
1.961	6.360	.0880.	.02420	06620	01500	.00180	.03430	.02610	.07990	.05030	1.58830
1.961	8.500	.09000	.02490	~.0 9600	02010	.00240	.03420	.02640	.08190	.05070	1.61670
1.961	10.560	.09430	.02550	12640	02510	.00510	.03360	.02700	.08820	.05090	1.69280
1.961	010	.07930	.02340	.00190	.00050	00020	.03280	.02610	.07170	.04720	1.51810
	GRADIENT	.00008	.00046	-,01030	00253	.00035	.00002	00024	.00007	,00004	,00036
									=		,

MSSS (FAS) NAR ATP ORB (BICIDIFINI)

(R76105) (03 NOV 72)

REFERENCE DATA

									PARAMETRIC	COATA	
erep .	7.4190 60		•	1530 IN.				ALPHA =	10,000	CONFIG =	1.000
LREF &	2,1020 IN			0000 IN.							1,000
BREF *	4.0300 IN	. ZHRP	, * .	5000 IN.							
SCALE &	.0040		•								
		RUN	NO. 47.0	RN/L =	4.13 GR	ADIENT INTER	RVAL = -5.0	00/ 5.00			
MACH	BETA	CN	CL.H	CY	CYN	CBL	CAF	CAB	CL.	6 0	
2.990	-10,170	.06200	.00920	.11130	.02080	00340	.03640	.01350	.07380	.05110	L/D
2.990	-6.220	.07690	.01000	.08920	.01670	00280	.03570	.01320	.07090	.04980	1,44530
2.990	-6,160	.07670	.01048	.06730	.01250	00220	.03450	.01350	06830.	.04980	1.42350
2.990	-4.100	.07520	.01120	.04410	.00840	00150	.03350	.01360	.06570	.04650	1.43160
2.990	-2,050	.07290	.01260	.02280	.00460	00080	.03190	.01350	.06570	.04490	1,41240
2.690	.000	.07160	.01270	.00260	.00050	-,00010	.03110	.01370	.06470	,04390	1,46240
2.990	2,040	08570.	.01220	01860	00390	.00060	.03160	.01340	,06560	.04390	1.47400
2.990	4.080	,07290	.01210	04150	00770	.00100	.03280	.01300	.06560		1.47230
2.990	6.170	.07650	.01340	06520	01170	.00190	.03380	.01260	.06890	.04580	1.45110
2.990	6.230	.07950	.01270	-,08870	01590	.00250	.03400	.01260	.07180	.04740	1.45200
2.990	10.216	.08310	.01200	11200	-,01990	.00310	.03490	.01270	.07520	.04830	1.48700
	GRADIENT	~.00003	.00007	01040	00199	.00031	00008	00006	00001	.04980 00009	1,50920
		RUN 1	NO. 3/0	RN/L =	4.85 GR/	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA	CN	CLM .	CY	CYN	CBL	CAF	CAB	CL.	60	L/D
4.959	-10.020	.05720	.00510	.08400	.01510	00270	.03720	.00280	.04940	.04720	1.04650
4.959	-8,110	.05500	.00160	.96570	.01160	00220	.03520	.00290	.04760	.04480	1.06170
4.959	-6,070	.05450	.00490	.05140	.00860	00170	.03410	.00300	.04730	.04360	1,08510
4.959	-4.040	.05550	.00440	.03310	.00550	60120	.03190	.00320	.04550	.04100	1.10800
4.959	-2.020	.05250	.00770	.01870	.00290	~.00060	.02990	.00350	.04610	.03910	1.17900
4.959	,000	.05050	.00810	.00530	.00020	00016	.02880	.00320	.04430	.03760	1.17690
4,959	2,020	.05050	.00620	01540	00220	.00020	.03090	.00180	.04390	.03980	1,10430
4.959	4.020	.05270	.00720	-,03200	00480	.00100	.03210	.00220	.04580	.04130	1,11070
4.959	6.100	.05520	.00630	04850	00760	.00150	.03290	.00270	.04610	.04260	1.13040
4.959	8.110	.05700	.00330	06620	01110	.00200	.03340	.00280	.04980	.04330	1,14930
4.959	10,050	.05650	.00290	+.08340	01430	.00250	.03520	.00280	.05100	.04540	1.12330
4.959	.010	,05780	.00590	01740	.00230	.00070	.02940	.00300	.05140	.03960	1,29700
	GRADIENT	00006	.00020	00815	00127	.00026	.00007	00018	00008	.00006	00343

MSSS (FAS) MAR ATP ORB (B1C1D1F1H1)

(R76106) (03 NOV 72)

REFERENCE DATA

										FARANCIR I	. UNIA	
NEF =	7.4190		HRP		.4930 IN.			•	ALPHA =	20,000	CONFIG #	1.000
LREF =	8,1020	IN. Y	MP	=	.0000 IN.						COL 14	1.000
BREF =	4,0300	IN. Z	MRP		.0000 IN.							
SCALE =	.0040											
	•	. •	UN NO	. 70/	0 RNAL =	4.96 G	RADIENT INTE	RVAL = -5.	00/ 5,00			
MACH	DETA	CN		CLM	CY	CYN	CBL	CAF	CAB	a.	œ	L/0
.596	-10,140	.1592	0	.05650	.10160	.02420	00460	01300	.03920	.13470	.03770	3,57220
.596	-8,190	.1379	0	.05530	,07730	.01630	-,00400	01270	.03980	.13330	.03750	3,55440
.596	-6.120	.1369	0	.05330	.05510	.01290	-,00350	01190	.03960	.13400	.03860	3,46580
. 996	-4,970	.1395	0	.05560	.03090	.00940	00270	01330	.04020	,13500	.03740	3.60290
,594	-2.020	.1379	0	.05170	.00550	.00800	00180	01530	.04050	.13430	.03510	3,82610
.894	000	.1366	0	.05530	00540	.00120	000090	~.01650	.04100	.13530	.03420	3.95110
.596	2.030	.1366	0	.05180	01170	00400	.00000	01820	.04220	.13610	.03270	4.16040
.596	4,040	,1400	0	.05360	-,02530	00860	.00110	01670	,04090	.13670	.03450	3.96330
.596	6,140	.1425	0	.05490	04820	-,01140	.00200	01260	.03910	.13760	.03920	3,50820
.596	8,150	.1412	3	.05840	07420	01490	.00260	~.01320	.03940	.13660	.03820	3,57500
.596	10,100	.1432	ם	.05920	09980	02010	.00370	01470	.03870	.13900	.03750	3.69760
.596	.000	.1367	3	.05210	00610	.00120	00080	~,01590	.04080	.13340	.03410	3.90960
	GRADIENT	,0000	•	.00000	00639	-,00227	.00046	00048	.00015	.00026	00041	.05215
:		R	JN NO.	. 197	0 RN/L ≖	4,28 GF	RADIENT INTER	RVAL = -5.0	6/ 5.00			
MACH	BETA	CN		CL.M	CY	CYN	CBL	CAF	CAB	Q.	69	L/D
ene.	-10.480	.17050	3	.07050	.15710	.03150	00620	01020	.04520	.16270	.05210	3,11810
.903	-6,480	.17160	3	.07430	.13400	.02470	00540	00980	.04500	.16370	.05310	3.08210
.903	-6,320	.16680)	.07520	.09210	.01720	-,60440	00840	.04370	.16040	.05320	3.01000
.903	-4.180	.16550	3	.07320	.04820	.01190	00320	00900	.04480	.15760	.05150	3,06000
.903	-2,080	.16410	1	.07420	.01760	.00090	00200	00870	.04450	.15610	.05120	3,04710
.903	.000	.16390)	.07150	00150	,00050	90100	01070	.04560	.15670	.04920	3,17980
.903	2.070	.16640	•	.07280	01590	00540	.00010	01160	.04710	.16120	.05010	3,21590
.903	4.130	.16650)	.07550	05750	01090	.00130	00920	.04380	.15850	.05160	3.06820
.903	6,340	.16900)	.07590	08400	01680	00290	00850	.04280	.16060	.05320	3.01570
.903	6,490	.16510)	.07260	-,14710	02460	.00460	01040	,04370	.15770	.05020	3.15070
.903	10,510	,17150	}	00270,	17890	03220	.00560	01160	,04410	.16400	.05120	3.19870
.903	.000	.16570	1	.07280	00150	.00010	00080	01110	.04590	.15840	.04960	3,19240
!	GRADIENT	.00030	1	.00015	00987	00279	.00053	00016	.00003	.00033	00004	.00896

MSSS (FAS) NAR ATP ORB (B1C1D1F1H1)

(R76106) (03 NOV 72)

REFERENCE DATA	REF	ERENCE	DA	r A
----------------	-----	--------	----	-----

GRADIENT

-.00020

.00087

-.01707

-.00150

.00051

-.00006

-.00000

-.00016 -.00012

.00064

REFERENCE DATA			PARAMETRIC DATA								
BREF =	7.4190 S			530 IN.				ALPHA =	\$0.000	CONFIG =	1.000
LREF #	2,1020 (-		000 IN.							
BREF =	4,0300 ti	4. ZHRP	* .0	000 IN.							
SCALE =	.0040			,							
		RUN 1	NO. 65/0	RN/L =	6.68 GR	ADIENT INTER	RVAL = -5.0	00/ 5.00			
MACH	BETA	CN	CLM	CY	CYN	CBL.	CAF	CAB	CL_	CD	L/0
1,196	~10,620	.24290	.07550	.16240	.03030	00670	.01540	.05400	.22030	.10340	2,12940
1.196	-6.590	.23430	.07580	.14160	.02140	00610	.01740	.05160	.21160	.10210	2.07290
1,196	-4.430	.22370	.07890	.11540	.01320	00510	.01790	.05100	.20166	.09870	2.04286
1.196	-4,290	.21290	.08170	.07590	00000	00360	.01880	.05070	.19130	.09540	2,00360
1,196	-2.120	.20640	.08430	.03800	.00500	00240	.01900	.05010	.18510	.09320	1,98500
1.198	010	.20290	.08850	.00710	00020	00100	.01840	.05020	.18210	.09140	1,99180
1.196	2,120	.20600	.08840	02880	00570	.00010	DSe10.	.04930	.18470	.09330	1,97940
1.198	4.250	.21470	.08650	~,067 80	01000	.00160	.01920	.04960	.19270	.09640	1,99740
1.198	6.490	.22660	.06270	-,11340	01370	.00340	.01620	.05110	.20510	.09820	2.08850
1,198	6.580	0 5 0 25.	.08190	15020	01910	.00470	.01400	.05220	.21740	.10080	2,15520
1,198	10,610	.24890	08380	-,17290	02810	.00560	.01210	.05360	.22700	.10270	2,20910
1,198	.000	.20240	.08940	.00510	0 0090	00000	.01790	.05030	.18180	08060.	2.00260
	GRADIENT	.00015	.00064	01661	00228	.00062	.00005	-,00014	.00011	.00010	00085
		RUN I	VO. 98/0	RN/L =	7.16 GR	DIENT INTER	VAL = -5.0	5.00			
MACH	BETA	CN	CLM	CY	CYN	CEL	CAF	CAB	a.	CO)	L/D
1,957	-10.630	.25010	.04870	.16960	.02090	00580	.92370	.03130	.22380	.11400	1.96230
1.957	-8,620	.24480	.04860	.14450	.01570	00510	.02400	.03190	.21880	.11220	1.94910
1.957	-6.460	.23930	.04920	.11370	.01070	00420	.02390	.03220	.21380	.11010	1.94190
1.957	-4.310	.23240	.05020	.00000	.00650	00310	.02340	.03180	.20760	.10710	1,93840
1.957	-2.160	.22540	.05440	.04280	.00310	00180	.02290	.05120	.20120	.10400	1.93430
1,957	020	.22160	.05690	.00700	00010	00080	.02180	.03050	.19830	.10160	1.95180
1.957	2.120	,22420	.05880	02960	00350	.00030	.02210	.03040	.20040	.10290	1.94810
1,957	4,250	.23090	.05730	-,06650	00630	.00130	.02320	.03120	.20630	.10640	1.93830
1,957	6.460	.24060	.05550	10530	00980	.00240	.02310	.03190	.21530	.10990	1.95800
1.957	8,590	.24710	.05540	13870	01440	.00340	.02340	.03210	.22120	,11260	1,96370
1.957	10,680	.25420	.05620	16920	01950	.00450	.02230	.03210	.22810	.11430	1,99430
1.957	.000	.21930	.05780	.00440	00050	00060	.02060	.03040	.19650	.09950	1.97360
	GRADIENT	~.00020	.00087	01707	00150	00051	- 0000	- nnnnn			

MSSS (FAS) NAR ATP ORB (BICIDIFINI)

(R76106) (03 NOV 72)

REPERENCE DATA

								i	PARAMETRIC	DATA	
BREP #	7,4190 60			1530 IN.		•		ALPHA =			
LREF =	2,1020 (1	i. YMRI), = ·	0000 IN,				MLTTIA II	20,000	CONFIG =	1.000
BREF =	4,0300 11	i, zher	• • .0	2000 IN.							
BCALE #	.0040										
		RUN	NO, 8/1	RN/L =	4.13 GR	ADIENT INTER	RVAL = -5.0	10/ 5.0 0			
MACH	AT38	CN	CLM	CY	CYN	CBL	CAF	CAB	c L		
E.990	-10.200	.21320	.04540	.12680	.01680	~.00400	.03160	.01280		CD	.L/O
8.990	-6,240	0560\$.	.04840	.10490	.01290	00340	.02950	.01280	.18750	.10630	1.76340
2.990	-6.170	.20540	.04850	.06140	05000.	00260	.02740	.01440	.18450	.10290	1.79280
2.990	-4.110	.20270	.05030	.05500	.00590	00200	.02580	.01450	.18170	.09961)	1.82420
R.990	-2.050	.19900	.05080	.02810	.00290	00110	.02420		.17980	.09710	1.85160
2.990	.000	.19850	.05070	.00250	00020	00050	,02340	.01450	.17690	.09430	1.87550
2.990	2,050	.19920	.05240	02500	00340	,00030	.02410	.01440	.17670	.09340	1.89180
2,990	4,110	.20110	.051eb	05160	00640	.00100	.02480	.01430	.17710	.09420	1.87890
2.990	6,190	.20550	.04970	07780	00960	00100	.02570	.01430	.17870	.09560	1.86830
2.890	4,240	.21050	.05006	-,10370	01270	.00250		.01430	.18240	.09800	1.86000
2.990	10,200	.21830	.04810	12730	01680	.00320	.02730	.01420	.18650	.10140	1.84000
	GRADIENT	-,60015	.00020	01296	00150	.00036	.02870	.01390	.19320	.10550	1.83050
		•			,00130	.00000	-,00010	00003	00010	00015	.00179
		RUN	NO. 67 1	RN/L =	4.84 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
МАСН	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	œ	
4.959	-10,020	.17490	.04090	De čćO .	.01100	00260	.03450	.00230	.15100	- -	L/D
4.959	-8,110	.17430	.04020	.07230	.00870	~.00220	.03200	.00270	.15130	.09460	1.59200
4.959	-6,060	.17040	.04128	.05230	.00630	00180	.02960	00290	.14860	.09220	1.63970
4.959	-4,040	.16600	.04485	.03630	.00410	-,00110	.02760	.00310		.00000	1.67710
4,959	-2.020	.16620	.04520	.01860	.00180	00060	.02650	.00330	.14700	.08590	1.71190
4.959	.000	.16450	.04500	.00040	00030	00030	,02510	.00340	.14570	.08420	1.72950
4,959	2,040	.16800	.04650	01770	00230	.00020	.02570		.14460	.08220	1.75800
4.959	4.040	.16920	.04400	03540	00490	.00050	02620	.00330	.14790	.08370	1.76570
4.959	6.100	.17260	.04440	05310	00700	.00110	.02020	.00350	.14860	.06500	1.74890
4.959	8,110	.17450	.04100	07350	00950	.00110		.00350	.15130	.08760	1.72740
4.959	10,040	.17630	,04000	09240	~.01170	.00200	.02920	.00350	.15250	.08960	1.70080
	GRADIENT	.00021	00001	~.00889	00109	.00200	.03120	.00330	.15530	.09290	1,67170
				1-3003		. 50020	00020	.00004	.00027	00011	.00546

MSSS (FAS) NAR ATP ORB (BICIDIFINI)

(R76107) (03 NOV 72)

REFERENCE DATA

PARAMETRIC DATA

	• "								-WWW-E IKI	- UNIA	
BREF # BREF # BCALE #	7,4190 80, 2,1020 IN, 4,0300 IN, .0040	YMRP	* .0	530 IN. 000 IN.				ALPHA =	30,000	CONFIG =	1.000
ocace o		RUN A	io. 8/0	RN/L =	4,13 GR/	ADIENT INTE	₹VAL = -5.0	00/ 5.00	-		
							· · · · · · · · · · · · · · · · · · ·	307 3.00			
MACH	ATES	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	CD.	L/O
2.990	-10.170	.36490	.08760	.12440	.01620	00360	.02660	.01400	.29690	.21370	1,38910
000.8	-6.210	.36080	.08620	01760.	.01300	00500	.02550	.01360	.29400	.21060	1,39620
2.990	-6,160	.35840	.02020	.07190	.01000	00230	.02400	.01380	.29260	.20610	1.40660
2.190	-4.100	.35560	,09140	,04690	,00650	00180	.08280	.01370	.29110	.20560	1.41570
2.990	-2,040	.35540	.09160	.02300	.00260	00130	.02190	.01390	.29130	.20470	1.42290
2,990	.000	.35230	.09400	.00010	00050	00090	.92150	.01380	.28890	.20270	1,42500
2,990	2.000	.35410	.09320	02470	00440	-,00050	.02130	.01370	.29050	.20360	1,42700
2,990	4.110	.35710	.09320	04800	00770	,00020	.02140	.01370	.29300	.20520	1.42810
E.990	6,160	.35850	.09250	-,07120	-,01140	.00060	.02240	.01320	.29370	.20680	1,42030
2,990	6,240	.36140	.09160	-,09640	01490	.00110	.02290	.01340	.29590	.20870	1.41760
2.990	10.210	.36750	.09090	12210	-,01800	.00180	.02430	.01350	.30030	.21320	1.40840
	GRADIENT	.00008	,00024	01156	00172	.00023	00017	00001	.00015	00009	.00141
		RUN N	0. 7/0	RN/L =	4.84 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA	CN ·	QLM .	CY	CYN	ŒL	CAF	CAB	CL.	G	L/0
4.959	-10.010	.32630	.07850	.08800	.01020	00260	.03290	.00160	.26180	.19760	1,32480
4,959	-6.080	.32260	.07880	.06700	.00800	00230	.03120	.00180	.25940	.19420	1.33620
4,959	-6.060	.31610	.06190	.04870	.00580	00170	.02910	.00190	.25670	.19010	1.35050
4,959	-4,040	.31620	.08410	.03160	.00350	00140	,02850	.00200	.25540	.18860	1.35420
4,959	-2,010	.31730	.08480	.01390	.00110	00120	.02720	.00190	.25700	.18810	1.36630
4,959	.000	.31430	.08700	00080	00050	-,00070	.02670	.00180	.25470	.18610	1.36860
4,959	2.040	.31710	.08440	02010	00280	00050	.02680	.00160	.25700	.18760	1.37010
4.959	4,040	.31980	.08710	03440	00500	00030	.02670	.00160	.25940	,18900	1.37250
4.959	6,110	.32120	.08450	05260	00770	00010	.02740	.00140	.26030	.19030	1.36780
4,959	8,110	.32220	.08510	07080	00990	.00040	.02810	.00120	.26070	.19130	1.36250
4.959	10,050	.32690	.08310	08840	01180	.00070	.03010	.00110	.26370	.19550	1.34880
	GRADIENT	.00035	.00028	00821	00103	.00014	00020	00005	.00040	.00001	.00200

MSSS (FAS) NAR ATP CRB (B1C1D1F1H1)

(R76108) (03 NOV 72)

REPERÈNCE	041	

.00026

-.000003

GRADIENT

-.00872

-.00086

.00005

-.**0**0028

.00012

.00037

.00002

.73830

.00069

									PARAMETRIC	DATA	
erep = erep = ecale =	7,4190 80, 2,1020 IN, 4,0300 IN, ,0040	YMRP	.0	530 TH. 000 TH. 000 TH.				ALPHA =	\$0,000	CONFIG #	1,000
		RUN F	NO. 204/ 0	RN/L =	4,14 GR	ADIENT INTER	RVAL = -5.0	00/ 5,00			
MACH	BETA	CN	CL.H	CY	CYN	CBL	CAF	CAB	_	_	
2.990	-10,090	.67610	.14910	.10170	.01070	00270	.01920	.01140	CL.	· CD	L/D
2.090	-0.150	.67640	.15110	05080.	.00820	00230	.01690	.01150	.40460 .40500	.54200	.74640
2,990	-6.120	.47560	.15210	.05670	.00560	00200	.01830	.01140	.40500	.54210	,74720
2,990	-4.060	.67490	.15430	.03810	.00330	-,00150	.01800	.01120	.40478	.54110	-74850
2,990	-2,020	.67380	.15420	.01690	.00080	00130	.01800	.01070	.40418	.54030 .53950	.74900
2.990	.010	.67460	.15440	00290	00190	00110	.01730	.01140	.40530	.53950	.74900
2,990	2.050	.67650	.15360	02460	00430	00080	.01690	.01200	.40660	.54090	.75070
2.990	4.060	.67860	.15350	04590	00680	00050	.01670	.01240	.40800	.54240	.75160 .75210
2,990	6,140	.66020	.15230	~.08880	00950	00030	.01680	.01170	.40900	.54380	.75200
2.990	8,170	.66960	.15140	-,09080	01250	.00010	.01700	.01180	.40910	.54440	.75160
2,990	10,130	.68180	.15050	11360	01510	.00040	.01710	.01190	.40970	.54520	.75150
	GRADIENT	.00050	00011	01032	00125	.00012	-,00018	.00018	.00045	.00028	.00043
		RUN N	D. 203/ 0	RN/L =	4.88 GRA	DIENT INTER	VAL ≈ -5.0	0/ 5,00			
MACH	BETA	ON	CLM	CY	CYN	CBL	CAF	CAB	QL.	6 0	L/0
4,959	-10,000	.64050	.14280	.08660	.00820	00190	.02950	.00000	,37750	.51820	.72850
4,959	-6,080	.63890	.14260	.06730	.00620	00160	.02810	.00090	.37770	.51610	.73170
4,959	-6,060	.63960	.14410	.04960	.00430	-,00150	.02710	.00100	.37890	.51600	.73420
4,959	-4.030	.63860	.14410	.03200	.00250	00140	.02720	.0e0090	.37830	.51550	.73390
4.959	-2.010	.63930	.14570	.01498	.00060	00150	.02640	.00070	.37920	.51540	.73580
4,959	,000	.63970	.14520	-,00210	00080	00140	.02560	.00120	.37990	.51530	.73730
4.959	2.020	.64050	.14410	02080	00280	00120	.02510	.00160	.38090	.51550	.73890
4,959	4.020	.64080	.14460	03790	00450	00100	.02500	.00170	.38120	.51570	.73930
4.959	6.070	.64270	.14460	-,05550	00630	00070	.02490	.00160	.38250	.51710	.73970
4,959	8,070	.64490	.14360	07370	~,00830	00030	.02530	.90140	.38350	.51910	.73880
4.959	10.050	.64510	.14070	09360	01050	00010	.92560	.00130	.38350	.51940	.73830

MSSS (FAS) NAR ATP CRB (B1C1D1F1H1) (WIE1)

(R76201)

				(FAS) HOR	ATP CHE IBIO		(R76201) (03 NOV 72)				
	REFEREN	CE DATA			•			-	PARAHETRIC	DATA	
eres =	7.4190 80	2.TH. 104RF		530 IN.				BETA =	.000	CONFIG =	2.000
LREF E	2.1020 th	-		1000 IN.				ELEVTR =	.000	OBDELY =	.000
erep =	4.0300 11	i. ZMRP		1000 IN.				TROELY =	.000	AILRON =	.000
SCALE =	.0040						•	CBDAIL =	.000	IBOAIL =	.000
		RUN	NO. 60/ 0	RN/L =	4.97 GR	שופאל ואופום	RVAL = -5.0	00, 5,00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL	co	L/D
.596	.670	02160	.01780	.00870	.00290	00040	.01490	.02480	-,02200	.01470	-1,49550
.596	2.670	.06920	.01300	.00770	.00400	.00020	.01500	.02380	.06850	.01820	3,75610
.596	4.790	.16390	.00710	.00670	.00410	,00000	.01040	.02390	.16240	.02400	6,74860
.596	4.890	.26030	00050	.00370	.00450	.00060	.00400	.02370	.25800	.03520	7,31220
.596	9,000	.37170	01370	.00270	.00470	.00110	-,00060	.02400	.36720	,05740	6.38820
.596	11,100	.47310	02490	00130	.00450	.00060	00310	.02450	.46480	.08800	5.27710
.596	15,210	.58580	03640	08200,-	.90 460	00010	00600	.02600	.57170	.12800	4.46340
.596	15,290	.67190	03660	00350	.08440	.00050	00760	.02950	.65020	.16980	3,62860
.596	17,440	.76370	04270	00640	.00410	.00150	00950	.03350	.73150	.21990	3,32640
.596	19.510	.64160	04160	~.00730	.00540	00030	01250	.04150	.79750	.26920	2.96210
.596	21.480	.87420	03290	01000	,00500	~,00270	01180	.04770	.81780	0560£.	2,64450
.596	11,120	.46530	-,02450	00550	.00450	ae000.	00310	.02470	.47680	.09050	5.26350
	GRADIENT	,04507	~,00260	-,00049	.00029	.00010	00110	00055	.04475	.00226	1.99511
		RUN	NO. 59/ U	RN/L, =	6.30 GRA	DIENT INTER	VAL = -5.0	90/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL.	CAF	CAB	a.	œ	L/D
.905	.640	05990	.04548	.01280	.0029O	00150	.02330	.02410	06010	.02260	-2.65380
.905	2.720	.04300	.03790	.01000	.00320	-,00150	.02210	.02310	.04190	.02410	1.73510
.905	4,940	.16570	.02270	.00650	.00350	00000	.01610	.02520	.16370	.03030	5.39620
.905	7.170	.29250	.00620	.00540	.00330	00060	.01400	.02380	.28650	.05050	5,71170
.905	9,370	.40550	00430	.00240	.00380	.00070	.01400	.02640	.39780	.07980	4,98110
.905	11.550	.51740	01930	00220	.00470	.00210	.01460	.02960	.50390	,11820	4.26050
.905	13,750	.62730	03500	00820	.00490	.00430	.01430	.03380	.60590	.16300	3,71530
.905	15.910	.75370	-,04410	-,01570	.00800	.00490	.01650	.03980	.70100	,21710	3.22860
.905	18,170	.63830	04320	01270	.00470	.00050	.01970	.04770	.79030	.28020	2,82020
.905	20.240	.66510	02910	00650	.00490	00710	.01830	.05650	.82400	.32340	2.54760
.905	22,270	.92590	-,02426	01480	.00540	00180	.01220	06360	.85220	.36230	2,35200
.905	11,560	.52120	-,01840	00220	.00430	.00180	.01670	.02950	.50730	.12100	4.19280
	GRADIENT	.05250	00530	00147	.08614	.00016	00169	00021	.05208	.00180	1,86960

MSSS (FAS) HAR ATP ORB (BICIDIFINI) (MEL)

	(OICIDITIAL)	MICES	(R76201)	(03 NOV 72)	

	REFER	ENCE DATA							PARAMETRIC		
seer =								•	THE PERSON	. UAIA	
SREF =	7,4190		٠.	4530 IN.				BETA =	.000	CONFIG =	2.000
BREF =	2.1020			0000 IN.				ELEVIR =	.000	OBDELY :	.000
SCALE .	4.0300	IN. ZHRP	* .	0000 IN.				IBDELY =	.000	ATLRON =	.000
BUNCE W	.0040	•						OBDAIL =	.000	IBDAIL #	.000
		RUN	NO, 56/	O RNAL =	6.70 GR	ADIENT INTE	RVAL = -5.0	0/ 5.00			•
MACH	ALPHA	CN	СГИ	ĊY	CYN	CBL	CAF				
1,195	.790	.01370	.02670	.00730	.00350	00040	.04560	CAB	CL.	CD CD	L/D
1,195	2,900	.13860	00250	.00530	.00410	.00000	.04520	.04370	.01310	.04580	.28710
1,195	5.150	.27510	03600	.00340	.00470	00020	.04520	.04440	.13610	.05220	2.60720
1.195	7.430	.40900	06510	00020	.00520	.00010	.04560	.04320	.26990	.06970	3.67050
1.195	9.680	.53640	09010	00510	.00590	.90010	.04570	.04130	.39970	.09810	4.07160
1.195	11.930	.66760	11410	00800	.00600	00020	.04630	.04170	.52310	.13560	3,85710
1.195	14.220	.79680	13250	01000	.00610	.00010	.04710	.04230	.64360	.18340	3,50790
1,195	16,420	.69210	13760	01340	.00630	.00250	.04760	.04540	.76080	,24140	3.15100
1,195	18,700	1,00910	-,14840	01670	,00570	.00190	.04700	.04900 .05390	.64230	.29790	2.82730
1,195	20,870	1.09970	15390	01830	,00540	00030	.04530	.05550	.93700	.36680	2.55360
1,195	22,950	1.16020	-,14900	01930	.00560	.00060	.04140	.05550	1.01130	.43420	2.32660
1,195	11,940	.67250	11410	00778	.00580	00010	.04620	.03910	1.05220	.49060	2,14450
	GRADIENT	.05919	01384	00095	.00028	.00019	00019	.00033	.64830	.18440	3,51430
						*******	100013	.00033	.05829	.00303	1.09957
		RUN N	D. 957) ROUL =	7.02 GR	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	69	L/D
1,961	.730	.02600	-,01750	.00780	.00380	~.00090	.05710	.02330	.02730	.05750	.47540
1,961	2.790	.10790	-,03090	.00620	.00400	60120	.05590	.02500	.10510	.06110	1.72040
1.961	5.000	.19080	04460	.00440	.00440	00130	.05580	.02540	.18520	.0722:0	2.56310
1,961	7.160	.27050	05690	.00210	.00480	00110	.05590	.02580	.26140	.08930	2.92490
1.961	9.360	,34640	06990	.00040	.00510	00070	.05570	.02550	.33470	.11160	2.99800
1,961	11.530	.42680	-,08230	00150	.00530	00040	.05560	.02500	.40700	.13980	2.91000
1.961	13.740	.50650	09210	-,00260	.00570	00010	.05470	.02480	.47900	.17350	2.75970
1.961	15,90G	.58230	-,10130	+.80510	.00510	.00030	.05260	.02570	.54550	.21020	2.59540
1.961	18,160	.66300	10850	00690	.00480	.00120	.05020	.02600	.61430	.25450	
1.961	20.320	73640	11110	00890	.00490	.00170	.04760	.02610	.67400	.30040	2.41380
1.961	22.410	.81140	11730	01000	.00450	.00360	.04480	.02750	.73300	.35080	2.24360
1.961	11.520	.41890	07610	00060	.00510	00060	.05490	.02540	.79958	.13750	2.08930
	GRADIENT	.03612	-,00634	00080	.00014	00009	00030	.00049	.03697	.00346	2.90560
										*40346	.48762

4.959

4,959

4.959

4,959

4,959

4.959

4.959

6.670

6,680

10.720

12.780

14.800

16,880

18,690

20,650

GRADIENT

020e0.

.13730

.18480

.23780

.29230

.35240

.41170

.47590

.01921

-.02890

-.02990

-.03410

-.05470

-.04030

-.04450

- .04690

-.05620

-.00126

.000e0

.00080

,00010

-.00160

-.00340

-.00470

-.00700

-.00990

-.00060

.00160

.00190

.00190

.00220

.00230

.00180

.00270

.00280

.00005

.00000

.00040

.00050

.00070

.00080

.00120

.00180

.00180

.00003

.05130

.8488D

.04730

.04530

.04430

.04290

.04250

.04310

-.00083

.00310

.00330

.00340

.00350

.00360

.00350

.00330

.00330

-.80007

.08370

.12830

.17270

.22160

.27120

.32470

.37570

.42930

.01828

.06150

.06900

.08090

.09680

.11760

.14340

.17350

.20970

.00024

1,36100

1.86080

2,13480

2.29020

2,30640

2.26350

2.16480

2.04650

.32284

REFERENCE DATA

MSSS (FAS) MAR ATP CRB (BICIDIFIMI) (MIEI)

(03 HOV 72)

									PARAMETRIC	DATA	
SAEP .	7,4190 80	a.th. XMRI	- 3,4	530 IN.				BETA =	.000	CONFIG =	2.000
LREF #	8.1020 1	H, YMRI		000 IN.				ELEVIR =	.000	CORTO =	- -
BREF =	4.0300 1	i, ZMRI	· = .c	1000 IN.				180ELV =	.000		.000
SCALE *	.0040			_					•	AILRON =	.000
								OBDAIL =	.000	180AIL =	.000
		RUN	NO. 19/ 0	RN/L =	4.12 GR/	DIENT INTER	IVAL = -5.0	00.8 10			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	ci	60	L/0
2.990	.660	00130	02390	.00730	.00240	De000	.05930	.01250	00200	.05930	03420
2.990	2,630	.04860	02690	.00530	.00240	08000	.05610	.01290	.04590	.06020	.76270
2.990	4,690	.10290	03210	.00450	.00280	00070	.05780	.01290	.09780	.06600	1.48020
2.990	6,790	.15990	03570	.00300	00290	00050	.05620	.01290	.15210	.07470	2.03560
2.990	€,640	.22020	04230	.00130	.00300	00030	.05440	.01320	.20920	.08760	2.38618
2.990	10,920	.20110	-,04820	.00010	.00310	00010	.05270	.01320	,26600	.10500	2.53190
2.990	13,020	.34600	05420	00120	.00320	.00020	.05160	.01320	.32540	,12830	2.53660
2.990	19,080	.41410	06130	00270	.00330	.00050	,05030	.01340	.38680	.15640	
2.990	17.210	.48500	0e92G	00510	.00330	.000080	.04880	,01340	,44890	.19010	2.47290 2.36060
2.990	19,260	.35760	07520	-,00530	.00340	.00120	.04710	.01360	.51080	.22860	
2,990	21,260	.62990	08290	00560	.00310	.00150	.04580	.01390	.57030	.27110	2.23420
	GRADIENT	.02586	00203	00069	.00010	.00005	00037	.00010	.02477	,00167	2.10330
									11000	,00167	.37557
		RUN	NO. 20/ 0	RN/L =	4.85 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CJ.M	CY	CYN	CBL	CAF	CAB	α.	60	
4.959	.660	02550	02270	.00450	.00160	~.00030	.05630	.00300	02620	.05600	L/D
4.959	2.590	.01270	02650	.00280	.00160	00030	.05410	.00210	.01030	.05460	~.46750
4,959	4.620	.05060	02770	.00210	.00180	00020	.05300	.00270	.04620	-	.18870
4.959	6.670	02060.	02890	.00090	70160	50000	50425		,04020	.05690	.01150

33.470

GRADIENT

1,35620

.03457

-.05260

-.00026

.901

-,03660

.00003

.01280

-.00024

.01000

-.00016

-.00570

-,00206

.07380

.00072

1,13440

.01738

.74320

.03598

1.52630

-,05654

(03 HOV 72)

(R76202)

MESS (FAS) NAR ATP CRB (BECEDIFINE) (MEEL)

				•							
	REFEREN	KE DATA							PARAMETRIC	DATA	
GREF & LREF &	7.4190 80 2.1020 (1 4.0300 (1	I. YHRP	.0	530 IN. 000 IN. 000 IN.			·	SETA =	.000	CONFIG =	000.s
BÉALE *	.0040							180ELV =	.00 0 .	AILRON = IBDAIL =	.000. 000.
		RUN	NO. 61/ 0	RN/L =	4.97 GR	отен тивто	RVAL = -5.0	00/ 5.00			
MACH	ALPHA	CN	GT.H	CY	CYN	CBL	CAF	CAB	a.	60	L/0
.597	22.010	.86480	02850	02410	.00790	00270	01198	.04900	.80620	,31310	2.57430
.597	23.930	.89600	02610	-,02630	.00840	00110	~.01390	.05310	.82460	.35080	2.35060
.597	26,000	.94500	02730	02050	.00750	00240	-,01490	.05610	.85590	,40080	2.13510
.597	28,050	.99760	03260	-,00870	,0 0540	00790	01660	.06180	.88830	,45460	1.95390
.597	30,100	1.05230	04270	.00420	.00740	00970	01900	.06760	.91980	.51140	1.79860
.597	32.160	1,13600	05560	-,00680	00960	00410	02280	.07020	.97520	.56580	1,66160
.597	34.290	1.21270	05740	02100	.01040	.00230	02640	.07280	1,01680	.66130	1,53730
.527	36,320	1.28470	05450	02870	.00960	.00360	03270	.07560	1,05440	.73470	1,43510
.497	38,460	1,34340	05200	02750	.00710	.00170	03880	.07860	1.07600	.80530	1,33600
.597	40,500	1.41720	05270	02260	.00590	.00130	04380	.08060	1,10610	.88700	1.24680
.597	42,500	1.47040	05310	~.02260	.00550	.00100	~.04900	.08100	1,11710	.95730	1,16690
.597	32.210	1,13660	05350	00950	.01000	00380	02360	.07070	.97590	.58690	1.66280
	CRADIENT	.03106	~,00160	-,00029	00005	.00034	00184	.00163	.01663	.03215	06673
		RUN I	NO. 62/ 0	RNI∕L =	6,28 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
МАСН	ALPHA	CN ·	CLM	CY	CYN	CBL	CAF	CAB	a.	Ф	vo
.401	22,610	<i>D</i> esse.	01750	-,01830	.00730	00160	.01050	.06240	.84660	.36760	2,30260
.901	24.610	.99120	02250	01700	.00720	08000.	.00770	.06510	.89640	.42300	2.11920
.901	26,970	1.08560	03440	01760	.00770	.00240	.00570	.06770	.96310	.49660	1.93940
.901	29.170	1,18400	05260	-,02610	.00970	.00610	.00400	.07000	1,03180	.56070	1.77670
20 0 .	31.320	1,27260	05390	-,03290	.01090	.00940	00050	.07140	1.08730	.66120	1.64440
.901	33,470	1.35100	05230	-,03650	.01240	.01020	00490	.07340	1,12970	.74090	1.52460
.901	35.650	1.43760	04620	02740	.00960	.00140	00890	.07650	1,17330	.83070	1.41240
.901	37.720	1,47660	03060	01840	.00570	-,00316	01670	.07710	1.17820	.89010	1.32350
.901	39.930	1.53580	03260	00940	.00320	00410	-,02060	.07800	1,19080	.97000	1.22760
.901	41.990	1.59150	05530	01860	,00340	00000	02620	.07670	1,20020	1,04540	1.14800
.901	44.000	1.64480	03220	-,02480	.00360	.00100	03360	.07670	1,20640	1.11850	1.07850

MSSS (FAS) MAR ATP CRB (BICIDIFINI) (MEL)

(RY4202) (S03 NOV YE)

REFERENCE DATA

PARAMETRIC DATA

sker +	7,4190 80	.IN. WEP	3,4	930 tH				BETA =	.000	CONFIG =	8,000
LREP =	2.1020 [H	•	•	005 IN.				ELEVTR =	.000	OBDELV =	.000
BREF =	4,0300 IN	. ZHEF	٠.0	000 IN.				TROELY =	.000	AILRON =	.000
SCALE =	.0040							CBOATL =	.000	TROATL =	.000
		RUN	NO. 11/0	RN/L =	4.12 GRA	DIENT INTER	VAL = -5.0	0/ 5.00	÷		٠.
MACH	ALPHA	CH	CLM .	CY	CYN	CBL	CAF	CAB	Q.	60	L/0
2.990	21.76G	.62240	08410	00640	.00330	.00140	.04500	.01400	.56120	.27280	2.05680
2.990	23,770	.69500	09160	00820	.00330	.00180	.04370	.01430	.61840	.32020	1.93130
2,690	25.690	.77450	-,10060	01130	,00360	.00200	.04290	.01440	.67800	.37690	1.79900
2.990	28,010	.65790	10980	-,01440	.00420	,00250	.04210	.01450	.73760	,44020	1.67550
2.990	30.090	.94520	11900	01720	.00470	.00290	.04190	.01460	.79670	.51030	1,56110
2.990	32,200	1.03020	12800	01940	.00490	.00320	.04150	.01460	,84950	.58410	1,45430
2.990	34.330	1.12080	13670	02180	.00500	.00360	.04060	.01470	,90250	.65580	1,35550
2.990	36,420	1.20990	14510	02430	.00540	.00400	.04040	.01460	.94940	.75100	1.26420
2.990	36,570	1.30200	15510	02780	.00530	.00390	.04030	.01400	.99270	.84350	1.17680
2,990	40.660	1,38610	16420	02990	.00530	.00390	.03940	.01430	1,02720	.93440	1.09920
2,890	42.660	1.46850	-,17200	03240	.00550	.00420	03880,	.01430	1.05330	1,02400	1.02860
	GRADIENT	.04095	00424	-,00126	\$1000.	.00014	00027	.00000	.02409	.03630	-,04916
		RUN	NO. 12/ 0	RN/L =	4.86 GRAI	DIENT INTER	VAL = -5.00	0/ 5,0 0			
HACH	ALPHA	CN	CLM .	CY	CYN	CBL,	CAF	CAB	ar a	00	L/0
4,959	21,400	.50160	05750	00890	.00230	.00190	.04530	aes00.	.45060	.22540	1.99900
4.959	23.350	.56970	06360	01010	.00220	.00220	.04550	.00330	.50500	.26760	1.88650
4.959	25,450	.64390	07060	-,01130	.00260	.00240	.04680	.00250	.56140	.31880	1.76070
4.959	27,480	.72180	08020	01540	,00310	.00240	.04710	.00300	.61860	.37490	1.64970
4,959	29,540	.80440	08780	01660	.00330	,00270	.04700	.00330	.67650	.43750	1.54610
4.959	31,600	.88730	~.09900	-,01840	.00360	.00290	.04800	.00330	.73050	.50590	1,44390
4.959	33,680	.97380	10780	01970	.00570	.00330	.04870	.00330	.78320	.58070	1.34860
4.959	35.720	1.05840	12070	05250	.00570	.00360	.04850	.00330	.83090	.65740	1,26370
4.959	37.630	1,14770	-,13080	02500	.00420	.00400	.94870	.00349	.87660	.74240	1.18070
4.959	39.660	1,23050	14320	02750	.00450	.00410	.04650	.00340	.91330	.82610	1.10550
4,959	41,840	1.31400	15720	03080	.00440	.00410	.04750	.00330	.94710	.91200	1.03850
	GRADIENT	.04007	00486	00105	.00011	.00012	.00015	.00003	.02474	.03383	04705

61,650

GRADIENT

1.97670

.03407

-,21770

-.00344

.02160

.00033

-.00120

-,00003

.00290

.00002

.03660

-.00036

.00240

-.00003

,90600

-,00177

1,75720

.04350

.51560

-.02662

MS95 (FAS) HAR ATP ORB (BICIDIFINI) (MIEI)

(R76203) (03 NOV 72)

					·						
	REFEREN	KE DATA							PARAMETRIC	DATA	
-	7.4190 80			30 IN.				BETA =	.000	CONFIG #	2.000
LREF =	8,1020 [H		_	00 IN.				ELEVIR =	.000	OBDELY :	.000
BREF =	4,0300 IN	. ZHRP	* .00	00 IN,			•	180ELY =	.000	AILRON #	.000
scale =	.0040			•				CBDAIL =	.000	180AIL =	.000
		RUN F	ió. 200/ G	RN/L =	4,16 GR	ADIENT INTER	VAL ≈ -5.0	0/ 5,00			
MÁCH	ALPHA	CH	CLM	CY	CYN	CBL.	CAF	CAB	Cr.	6	L/O
2,990	42,020	1.42860	16350	.01240	-,60070	.00S00	.03740	.01250	1.03610	.98420	1,05260
2.990	43,970	1.90580	16930	.01230	-,00060	De100.	.03670	.01280	1.05820	1,07190	.98720
2.990	46.030	1.56550	-,17460	.01150	00050	.00180	.03660	.01280	1,07280	1,16530	.92050
2.990	48,110	1.65620	16010	.01330	~.00080	.00180	.03630	.01290	1,07870	1.25720	.85790
#.99D	90,160	1.72880	-,16620	.01420	00110	.00200	.03500	.01300	1,08040	1,35000	.80030
2.690	62,220	1,79420	-,19140	.01440	00100	.00230	.08550	.01310	1.07230	1,43890	.74520
2.890	54,270	1,65160	19250	.01530	00100	.00230	.03330	.01320	1,05420	1,52280	.69230
2.990	56,290	1.69950	19100	.01750	-,00110	.00160	.03268	.01300	1.02660	1,59840	.64240
2.990	58,370	1,94260	19020	.01770	00120	.00160	.03150	.01280	.99180	1.67080	.59360
2.990	60.390	1,98170	18840	.01930	00120	.00140	.03030	.01270	.95270	1.73800	.54810
000.3	62,340	2.01610	16940	,01920	00120	.00160	.02890	.01290	.91020	1,79920	.50580
	GRADIENT	.02905	00125	,00048	00003	00002	-,00041	10000	-,00633	. G4054	02674
		RUN N	D. 199/ 0	RN/L =	4,91 GR	DIENT INTER	VAL = -5.00	D/ 5.00			
MACH	ALPHA	ON	G.M	CY	CYN	CBL	CAF	CAB	α.	69	L/0
4.959	41.520	1,29960	15230	.01530	00070	.00250	.04470	.00250	.94320	.89520	1,05370
4.959	43,440	1.37920	16250	.01570	00050	.00270	.04360	.00270	.97120	.96020	.99080
4,959	45.470	1.46330	17620	.01450	00080	.00250	.04290	.00290	.99530	1,07340	.92720
4.959	47.550	1.54710	18610	.01610	00120	.00240	.04240	.00300	1,01320	1.16990	,66600
4.959	49.570	1.62360	19380	.01710	00070	.00230	.04230	.00300	1.02070	1,26340	.80790
4,959	51.600	1.69450	-,20000	.01650	-,00090	.00190	.04170	.00300	1.01970	1.35390	.75310
4.959	95,630	1,76370	20720	.01860	~.00130	.00220	.04030	.00300	1.01320	1,44410	.70160
4.959	55,640	1.82790	21570	.01910	00120	.00260	.03940	.00300	.99900	1.53120	.65240
4,959	57,710	1.88950	-,21940	.02070	00100	.00280	.03970	.00180	.97570	1.61860	.60280
4,959	59.710	1.93470	-,22170	.01940	~.00130	.00280	.03620	.00220	.94270	1.68990	.55780
4 040	44 480	1 07470	_ 94990	00440	- 60466	anaan					

10.250

GRADIENT

.000

.00290

-.02160

.00278

.03190

.04200

.00012

-.07710

.00070

-.00658

-.02550

-.00090

-.00236

.01320

.00300

,00105

.01640

.02310

-.00080

.02790

.02200

.00054

(95 NOV 72)

(R76204)

.00300

-.02180

.00278

.01640

.02310

-.00080

.18340

-.94310

.09017

MSSS (FAS) MAR ATP ORB (BICIDIFINI) (MEI)

						•••					
i	REFEREN	CE DATA							PARAMETRIC	DATA	
SREF =	7.4190 \$	2.1N. 104RP 1	5,45	30 IN.				ALPHA =	.000	CONF16 =	2.000
LREF =	2.1020 H	YMRF	.00	308 EN.				ELEVTR =	.000	CBDELA *	.000
BREF &	4.0300 th	N. ZHRP	.00	000 IN.	1			180ELV =	.000	ATLRON =	.000
SCALE .	.0040							CBOAIL =	.000	IBOAIL =	.000
		RUN NO	. 76/ 0	RN/L =	4,99 GR	ADIENT INTER	VAL = -5.00)/ 5,0 0			•
MACH	ATS	CN	CLM	CY	CYN	CBL.	CAF	CAB	a.	œ	L/O
. 599	-10.070	00740	.00960	.06960	.02260	-,00870	.01470 -	.02580	90740	.01470	50450
.500	-8.160	00400	.01190	.05620	.01810	00580	.01550	.02560	-,00400	.01550	25770
.599	-6,100	00210	.01550	.03860	.01330	00260	.01750	.02370	00200	.01750	11960
.599	-4.060	.00050	.01710	.02640	.00850	00010	.01670	.02430	.00050	.01670	.03520
.999	-2.030	.00810	.01790	.01200	.00420	.00180	.01590	.02430	.00810	.01590	.51340
	.000	.01130	.02020	.00000	.00000	.00450	.01480	.02530	.01130	.01460	.76720
.599	2.030	.01780	.02010	01380	80430	.00680	.01290	.02660	.01780	.01290	1,37770
.599	4,060	.02480	.01830	02700	00910	.00810	.01260	.02700	.02480	.01260	1.97320
.599	6,140	.02640	.01790	04130	01320	.01020	.01220	.02730	.02840	.01220	2.33020
.599	8,140	.03470	.01760	05610	01780	.01190	.01180	.02780	.03470	.01170	2,95500
.599	10,090	.03670	.01490	07130	02190	.01360	.01180	.02780	.03670	.01170	3,12570
.599	.000	.01010	.01940	-,00230	-,00030	.00490	.01450	.02490	.01010	.01450	.70060
	GRADIENT	.00287	.00023	00653	00215	.00105	~.00055	,00036	.00287	00055	.25351
		RUN NO.	75/ 0	RN/L =	6.29 GR	ADIENT INTER	VAL = -5.00	5,00			
MACH	BETA	CN CN	CLM .	CY	CYN	CBL	CAF	CAB	ar.	6 0	L/O
.905	-10,240	04660	.02870	.07860	.02620	01080	.01900	.02680	04660	.01920	-2.42180
.905	-6.280	04020	.03310	05090.	.02040	-,00740	.02090	.02530	04010	.02100	-1.90600
.905	-6.190	03610	.03710	.04310	.01430	00420	.02290	.02350	03600	.02300	-1.56230
.905	-4.120	05510	,04130	.02860	OEe00.	00170	.02410	.02300	03510	.02420	-1,44650
.905	-2,060	02980	.04430	.01560	.00430	.00050	.02350	.02310	02970	.02360	-1.26040
.905	.000	02450	.04520	.00170	00050	.00270	.02340	.02260	02440	.02350	-1,04070
.905	2.060	~,01800	.04490	01170	00550	.00480	.01990	.02540	01790	.01990	~.90020
.905	4.100	01240	.04220	02520	01010	.00690	.01770	.02740	01240	.01780	69970
.905	6.230	00340	.03940	04210	01510	.00890	.01830	.02720	-,00340	.01840	~.18850
.905	8,260	00110	.03640	05710	02030	.01060	.01730	.02790	00110	.01730	-,06400

(03 NOV 72)

(R76204)

MSSS (FAS) NAR ATP ORB (BICIDIFIHI) (WIEI)

REFERENCE DATA PARAMETRIC DATA WET 7.4190 SQ.IN, MRP 3.4550 IN. ALPHA = .000 CONFIG = 2.000 LREP 2.1020 IN. YHRP .0000 IN. ELEVIR = .000 OBDELV × .000 BRTT 4.0300 IN. ZHRP .0000 IN. 180ELV = .000 ATLRON = .000 SCALE . .0040 OBDAIL = .000 IBDAIL = .000 RUN NO. 74/ 0 RN/L = 6.67 GRADIENT INTERVAL = -5.00/ 5.00 MACH BETA CN CLH. CY CYN CBL CAF CAB Œ æ L/D 1.197 -10.370 -.01730 .02170 .08500 .02970 -.00660 .04940 ,03940 -.01710 .04940 -.34740 1,197 -0.360 -.00430 .02320 .06390 .02320 -,00310 .04940 .03960 -.00420 .04940 -.08680 1.197 -6.250 .00760 .02490 .04510 .01660 ~.00060 .04960 .03940 .00790 .04950 .16020 1,197 .01500 -4,150 .02590 .02700 .00170 .01070 .04960 .03930 .01510 .04960 .30490 1.197 -2,070 .02140 .02730 .01200 .00500 .00540 .04840 .04030 .02140 .04840 .44290 1.197 .010 .02740 .02670 -.00290 ~.00050 .00430 .04650 .04190 .02740 .04650 .59040 1,197 2,090 .03350 .02610 -.01750 -.00570 .00530 .04410 .03350 .04450 .04410 .76090 1,197 4,200 .03960 .02330 -.03290 -.01130 .00580 .04280 .04600 ,03960 .04280 .92690 1,197 6.310 .04400 .02100 -.05030 -.01690 .00710 .04250 .04660 .04400 .04250 1.03490 .04550 1.197 8.370 .01800 -.07040 -.02290 .00870 ,04230 .04760 .04550 .04230 1.07610 1,197 10,410 .04320 .01430 **-.093**80 -.02910 .01120 .04210 .04770 .04320 .04210 1.02650 1.197 .010 .03030 .02560 -.00320 -.00050 .00410 .04650 .04200 .03030 ,04650 .65270 GRADIENT .00294 -.00031 -.00716 -.00262 .00048 -.00086 .00084 .00293 -.00086 .07489

		RUN	ND. 92/	RN/L =	7.04 GR/	CIENT INTER	IVAL = -5.0	D/ 3.00			
MACH	BETA	CN	CLM	CY	CYN	CBL.	CAF	CAB:	a.	69	L/D
1.957	~10.480	.01250	02010	.10470	.02830	01480	.05790	.02380	.01270	.05790	.21960
1.957	-8.460	.02540	01980	.07780	.02310	01170	.05780	.02340	.02550	.05770	.44260
1,957	-6.320	.03430	01920	.05460	.01740	00830	.05740	.02420	.03440	.05730	.60040
1.957	-4,190	.04350	-,01910	.03320	.01200	00520	.05700	.02420	.04350	.05690	76490
1.957	-2.100	.04920	01990	.01510	,00640	00220	.05720	,02370	.04930	.05720	.86240
1.957	.000	.05280	02110	~.00150	.00050	.00100	.05650	.02510	.05290	.05640	.93690
1.957	2,100	.05570	02100	01740	00530	.00400	.05600	.02580	.05570	.05590	.99620
1.957	4,200	.05660	02180	03490	01060	.00700	.05630	.02580	.05680	.05630	1.00920
1.957	6.350	.05580	02130	05580	01680	.01030	.05610	.02610	.05380	.05610	.95920
1.957	6,460	.04930	+.02120	07960	02160	.01310	.05650	.02640	.04930	.05640	.87410
1,957	10.490	.04260	02220	10500	02700	.01560	.05630	.02710	.04270	.05620	.75870
1,957	.000	,05150	-,02060	00170	.00020	.00110	.05600	.02520	.05160	.05590	.92270
	GRADIENT	.00158	00031	00804	00271	.00146	00012	.00025	.00157	00012	,02966

,903

.903

.903

.903

.903

.903

2,100

4,150

6,280

8,340

10.280

GRADIENT

.020

.59310

.60070

.59940

.59670

.56676

.56700

.00330

-.02550

-.02520

-.02780

-,02900

-.02650

-.02440

.00013

-.03070

-.04250

-.05870

-.07620

-.09190

-.01710

-.00650

-.00260

-.00810

-.01390

-.02030

-.02730

-.00268

.00260

.00630

.00370

.00090

-.00000

-.00220

-.00420

.00620

-.00111

.01680

.01470

.01450

.01360

.01310

.01250

.01640

-,00031

.03110

.03270

.03270

.03230

.03300

.03340

.03110

.00045

.57100

.57780

.58520

.58410

.58350

.57400

.57150

.00327

.13530

.13480

.13620

.13500

.13420

.13150

.13500

.00045

4.21990

4,28640

4.29530

4.32630

4.34610

4.36500

4.23300

.01015

MSSS (FAS) NAR ATP ORB (BICIDIFINE) (WEEL)

(R76205) (03 NOV 72)

	REFERENCE	E DATA									
									PARAMETRIC	DATA	
SREF =	7.4190 EQ.1	IN. 104RI	· = 3,4	1530 IN.				ALPHA =	10,000	-	
LREP =	2.1020 IN.	YHER	· = .	0000 IN.				ELEVIR =	200.	CONFIG =	2,000
GREF =	4.0300 IN.	ZHRI	ه. ه ۱	3000 IN.				IBDELY =	.000	OBDELY =	.000
BCALE .	.0040									ATLRON =	.000
								OBDATL =	.000	IBDAIL =	.000
:		RUN	NO. 48/ 0	RIVL =	4,99 GR	ADIENT INTER	RVAL = -5.0	00/ 5.0 0			
MACH	BETA	CN	CLM	CY							
.601	-10,100	.51610	02650	.06390	CYN	CBL	CAF	CAB	CL.	CD	L/D
.601	-6.150	.52260	02510	•	.02600	.00570	00230	.02730	.50680	.09750	5,19520
.601	De0.a−	.53730	02580	.04590	.02080	.00630	~.00100	.02490	.51290	.10010	5,12000
.601	-4.020	.94240	· ·	.02810	.01520	.00610	00120	.02480	,52730	.10290	5,12050
,601	-8.010	.55270	02490	.01110	00000	.00550	00130	.02280	.53230	.10390	5,12070
.601	.010		02460	00250	.00560	.50500	00210	.02380	.54260	.10520	5,15360
,601		.55900	02430	-,01620	.00110	.00430	00390	.02390	.54910	,10460	5,23950
	2.050	.56550	02450	03000	00370	.00448	~.00520	.02460	.55560	.10480	\$.29800
.601	4,080	.56850	02210	04130	00760	.00310	-,90670	.02610	.55890	,10390	5.37510
.601	6,160	.57200	02420	05600	01220	.00230	00560	.02470	.56220	.10560	5.31340
.601	8.150	.57770	02460	07080	01690	.00200	-,00770	.02738	.56810	.10480	5.41810
.601	10,090	.57620	02710	08720	02160	.00160	00778	.02790	.56660	.10460	
.601	.010	.56530	02230	01510	.00100	.00430	00410	.02420	.55530	.10590	5.41680
	GRADIENT	.00320	.00029	00653	00216	-,00027	00069	.00037	.00327	~.00002	5.24320 .03225
											.03223
		RUN	NO. 47/ 0	RN/L =	6,27 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	~		
.903	-10.290	.59720	05760	,08260	.02940	00610	.01320	.02900	CT.	co	L/b
.903	-8.290	.56250	03140	.04970	.02680	.00830	.01600	.02950	.58220	,18340	4.36190
.903	-6.180	.56660	02770	.02620	.02100	.01110	.01680		.54770	.12910	4.24240
.903	-4.110	.57220	02570	.01130	.01420	ceecu.	.01680	.03000	.55150	.13080	4.21640
.903	-2.030	.58200	02720	00410	.00820	.00330	.01640	.02960	.55700	.13210	4.21630
.903	.020	58660	~.02500	01620	00290	.00630	.01640 .01680	.02950	.56668	.13380	4.23500
										44444	

.00414

MB55 (FAS) NAR ATP CRB (BICIDIFINI) (MEL)

(R76205) (03 NOV 72)

REP	ERENCE	DA	r A

PARAMETRIC DATA

											- Unin	
SREF	7.4190		MRP =	1	.4580 IN.				ALPHA =	10.000	CONFIG 2	2.000
LREF &	2,1020	IN. Y	HRP =		.MJ 0000.				ELEVIR =	.000	OBDELY =	.000
BREF .	4.0300	IN. Z	4RP =		.0000 IN.				IBOELV =	.000	AILRON #	.000
SCALE .	.0040								OBDATL =	.000	IBDAIL :	.000
										2000	toovic "	.000
			UN NO.	46/	G RN/L =	6,67	RADIENT INTER	VAL = -5.0	00, 5.00			
MACH	BETA	CN	•	LM.	CY	CYN	CBL	CAF	CAB	CL.	æ	L/D
1,196	-10,400	6517	3	11460	.07540	.03450	.00720	.04620	,04470	.62820	.17960	3,49670
1,196	-8,370	.67150	3 -,	11440	.05010	.02790	,60850	,04610	.04430	.64740	.18410	3,51580
1,196	-6.240	•) -,	11410	.03030	,02150	05900,	.04690	,04210	.65920	,18780	3,50940
1,196	~4,140	.49621	3 -,	11700	01010.	.01530	.00640	.04790	.04090	.67100	,19170	3.49990
1.196	-2,050	.70621	٠.	11670	-,00500	.00940	.00450	.04770	.04190	.68080	.19390	3.51110
1,196	.030	.71740) -,	11760	01950	.00350		.04820	.04230	.69150	.19690	3.51110
1,196	2,130	.72510		11860	03360	-,00230	.00130	.04740	.04350	.69920	.19790	3.53190
1.196	4,190	.72680)	11930	-,04740	-,00810	-,00016	.04720	.04270	.70090	.19800	3,53190
1,196	6.330	.72810) -,	11910	06340	01450	-,00270	.04580	.04390	,70240	.19710	3,56400
1.196	6.410	.7256	٠.	11940	08210	02120	00470	.04590	,04450	.69990	.19660	3,55960
1.196	10,430	.71780	٠.	11890	-,10430	~.0280C	00500	.04610	.04500	.69230	.19490	3.55160
1.196	.030	,71700	٠.	11720	-,01990	.00340	.00250	.04820	.04180	.69110	.19680	
	GRADIENT	.00365		00031	-,00689	00261	00078	00000	.00025	.00375	.08000	3,51030 ,00468
		R.	N NO.	94/	0 RN/L ≈	7.02 G	RADIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA	CN	c	LM	CY	CYN	CBL	CAF	CAB	a.	æ	L/D
1.961	-10,480	.41360	٠,	07850	.09490	.03000	00430	.05170	.02690	.39500	.13320	2,95390
1.961	-8,450	.42330	٠.	07990	.06910	.02540	00330	.05220	.02590	,40430	.13580	2,97690
1.961	-6.310	.43370	٠.	07990	.04430	.02000	00220	.05280	.02480	.41430	.13860	2,98900
1.961	-4.170	.45130	٠.	08320	.02390	.01410	66120	.05360	.02470	.43130	.14330	3,00920
1.961	-2,090	.45560		06350	.00650	.00820	00010	.05410	,02540	.43530	.14470	3.00720
1.961	.010	.46260	٠,-	08410	01000	.00250	.00090	.05420	,02590	.44220	.14630	3.00720
1,961	2.150	.45650	٠.	08260	02670	60370	.00210	.05400	.02580	.43830	.14520	
1.961	4,210	.46020	٠.	08290	04270	00920	.00290	.05260	.02600	.44010	.14440	3,01840
1.961	6.380	.46240	·	08580	06180	01490	.90340	.05260	.02570	.44240	.14470	3.04710 3.05610
1,961	8,470	.45740		08360	08470	02080	.00380	.05270	.02610	.43740	.14370	3.04270
1.961	10,500	.45250		09260	11010	-,02620	,00410	.05280	.02700	.43260	.14280	3.02950
1.961	010.	.45150	1	06210	01130	.00210	.00110	.05380	.02570	.43150	.14350	3.02950 3.00700
	GRADIENT	.00099	•	70000	~,00793	00279	.00050	00008	.00014	.00098	.00013	.00414

4,959

10,060

GRADIENT

.19140

.00081

-.03290

-.00019

-.08040

-.00714

-.01760

-.00187

-.00080

-.00019

.05280

£00005.

.00400

.00002

.17820

.00079

.08750

.00016

2.03580

.00495

MSSS (FAS) NAR ATP ORB (BICIDIFINI) (MIEI)

(R76205) (03 NOV 72)

,											
	REFERENC	E DATA							PARAMETR 1	DATA	
SACE .	7.4190 80.	IN, 104RP	* 3,4	530 IN.				ALPHA =	10,000	CONFIG =	2.000
LREF . #	2.1020 IN.			000 IN.				ELEVTR =	.000	OBDELY =	.000
BREF B	4,0300 IN.	ZHRP	₹ ,0	000 IN.				IBOELY =	.000	AILRON =	.000
SCALE =	.0040							CBOAIL =	.000	IBDAIL =	.000
		RUN 1	D. 18/ 0	RN/L =	4.11 GR/	DIENT INTER	VAL = -5.0	9,00		-	
MACH	BETA	CN	CLH	CY	CYN	CBL	CAF	CAB	CL.	œ	L/0
2.990	-10.150	.27530	-,05080	.09030	,02440	00250	.05580	.01420	.25970	.19690	2,42940
2.090	-8.220	.28120	-,04960	.07000	.02030	00218	.05470	.01430	.26570	.10780	2,48270
2.990	-6,140	.26360	05020	.04760	.01550	00140	.05360	.01430	.26840	,10660	2.51630
2.690	-4.090	.26770	05110	.02730	.01100	00100	.05330	.01400	.27240	.10690	2.54660
2.990	-2,040	.29250	-,05020	.01030	.00630	-,00020	.05250	.01370	.27720	.10710	2.58680
2.990	.000	.29360	05040	00660	.00140	.00040	.05220	.01360	.27840	.10700	2.60090
2.990	2.050	.29630	05120	02290	00360	.00120	.05290	.01570	0808\$.	,10820	2,59560
2.990	4,120	.29770	05220	04120	00840	.00160	.05400	.01390	.28210	.10950	2.57590
2.990	6,170	.29530	05070	06020	01320	.00210	.05460	.01400	.27960	.10960	2,54910
2.990	6.210	.29490	- 05000	08110	01770	.00200	.05550	.01410	.27900	.11050	2.52490
2.990	10,180	.29290	05070	10270	02210	.00550	.05600	.01430	.27700	.11050	2,50490
	GRADIENT	.00116	-,00016	00830	00237	.00032	.00009	00001	.00112	.00031	.00310
		RUN N	17/0	RN/L =	4,80 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	œ	L/o
4.959	-10.020	.17450	02970	.07340	.01930	.00050	.05320	.00300	.16150	.08470	1,90680
4.959	-8,110	.17860	03020	.05790	.01580	.00070	.05216	.00330	.16580	.08440	1,96430
4.959	-6.070	.18320	03160	.04020	.01240	.00100	.05060	.00350	.17050	.08380	2,03510
4.959	-4.040	.16760	03260	.02470	.00850	.00000	.04860	.00370	,17540	.08280	2.11910
4.959	-2.020	.19200	03390	.00990	.00480	.00060	.04730	.00370	.17990	.08230	2.18600
4.959	.000	.19250	~.03450	00550	.00120	.00010	.04680	.00360	.18040	.08180	2.20450
4,959	2.020	.19810	03320	01920	~.00260	+.00030	.04730	.00380	.18580	.06340	2.22670
4.959	4,040	.19290	03510	05290	00670	00070	.04890	.00390	.18040	.08390	2,14670
4,959	6.110	.19570	03460	04890	-,01070	00090	.05060	.00390	.18090	.08570	2,10900
4.959	8,110	.19000	-,03450	06550	01410	00080	.05130	,00400	.17710	.08580	2.06430
		4.0									

MSSS (FAS) MAR ATP ORB (BICIDIFINI) (WEEL)

(876206) (03 NOV 72)

REFERENCE DATA

PARAMETRIC DATA

	*D-0.C	TE UNIA							PARAMETRI	E DATA	
SACT &	7.4190 60			1530 IN.			,	ALPHA =	20,000	CONFIG =	2.000
LREP =	8.1020 IN	-		0000 IN.				ELEVTR =	.000	OBDELY =	.000
BREF =	4.0300 IN	i, zhef	• •	0000 IN.				180ELV =	.000	ATLRON =	.000
BCALE =	.0040					*		OBDAIL =	.000	IBDAIL =	, 000
		RUN	NO, 71/0	RN/L =	4.96 GR	VDIENT INTER	RVAL = -5.0	00, 5.00			
MACH	BETA	Φŧ.	CLM	CY	CYN	CBL.	CAF	CAB	Q.	69	L/0
.596	-10,100	. 47850	02936	.05900	.02970	00540	~.01620	,04360	.82210	.31010	2,65040
.596	-8,160	.88130	02810	.04310	.02410	00670	01620	.04510	.82460	.31120	2.64940
.596	-6,120	.08418	-,02600	.02670	.01800	00730	01540	.04650	.82690	.31310	2.64090
.596	-4.050	.67690	02400	.00860	.01340	00680	01440	.04820	.81990	,31130	2.63330
.596	-2.010	.87870	02090	01400	.01000	00650	01620	.05070	,82220	.31040	2,64830
. 596	.010	.87150	-,01640	02860	.00590	00420	01930	.03460	.81660	,30460	2.67920
,596	2.040	.87340	01480	03770	aeoo o ,	-,00180	01650	.05210	.81740	.30820	2.65230
.596	4.060	.87160	01560	-,05040	~.00520	.00070	01580	.05020	.81550	.30800	2.64710
.596	6,160	.87550	01630	-,06880	00950	.00070	01550	.04640	.81890	00000	2.64240
.596	8,170	.87680	-,01810	~.08790	01550	.00130	01750	.04750	.82090	.30850	2,66100
.596	10,120	.69160	01870	10690	02230	.00510	01680	.04500	.83510	.31290	2,66830
.596	.020	.87090	-,01640	02960	.90580	00450	01660	.05240	.81510	.30710	2,65400
	GRAD1ENT	00078	.00113	-,00679	00228	.00097	00015	.00027	-,00067	-,00043	.00156
		RUN 1	NO. 72/0	RN/L =	6,29 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA	ON.	CLM	CY	CYN	CBL	CAF	CAB	CL.	00	L/D
.904	-10,330	.90630	02130	.08320	.03910	.01320	.00770	.05970	.83440	.35390	2,35750
.904	-8.350	.92380	01960	.06270	.03080	.00960	.00940	.05880	.84980	.36250	2,34390
.904	-6,200	.94720	02110	.05540	.02080	.00540	.00960	.06050	.87090	.37230	2,33880
.904	-4,110	.95140	02170	.01350	.01370	.00190	.00820	.06280	.87530	.37290	2.34710
.904	-2.030	.95240	0176G	00740	.00870	.00070	.00780	.06530	.87640	.37300	2,34930
.904	.030	.95080	-,01360	02460	.00350	.00030	.00870	.06470	.87450	.37320	2,34310
.904	2.110	.96180	01250	03940	00290	.00000	.00950	.06350	.68420	.37860	2.33510
.904	4.160	.96700	01190	05520	00850	00110	.00780	.06340	.88960	.37920	2,34610
.904	6,340	.96710	01430	08020	01590	-,00610	.00660	.06390	.09010	.37830	2,35290
.904	€.390	.94210	01150	10400	02480	01040	.00460	.06210	.86820	.36590	2.37260
,904	10.416	,93400	01650	12860	03450	01530	.00510	.06120	.86060	.36300	2.37070
,904	.040	.95500	01170	02640	.00280	.00060	.00870	.06470	.87830	.37510	2.34100
	GRADIENT	.00196	.00119	00819	00271	00032	.00004	00003	.00176	.00088	00079

GRADIENT

.040

1.957

.85990

.84490

.00164

-.12630

-,12480

.00006

-.13560

-.01970

-,01061

-.02390

.00280

-:01120

.00250

-.00164

.04130

.04070

-.00012

.02860

.02780

-.00002

.77690

.76360

.00153

.37080

.36390

.00058

2.09480

2,09840

.00086

MSSS (FAS) MAR ATP CRB (BICIDIFINI) (MIEI)

(RT6206) (03 NOV 72)

			H331	PIPES) HOR	AIF CRB (BI	CIDIFINI) (M	IEI)		(RT62)	96) (93 N	OV 72)
-	REFEREN	KE DATA							PARAMETRIC	DATA	
eacy .	7.4190 80			1530 IN.				ALPHA =	20,000	CONFIG =	8.000
LREF =	2,1020 IN			3000 IN.				ELEVTR =	.000	OBDELY *	.000
BREF #	4.0300 IN	I. ZMRP	± .(2000 IN.				180ELV =	.000	ATLRON =	ooo.
SCALE =	.0040							CEDAIL =	.000	IBDAIL =	.000
		RUN	NO. 73/ (RN/L =	6,68 GR	ADIENT INTER	RVAL = -5.0	30/ 5.00			
MACH	BETA	CN	CLH	CY	CYN	CBL	CAF	CAB	CL.	co	L/0
1,100	-10,400	1.15620	15700	.06770	.03810	.02420	.03930	,05170	1.04730	.49150	2,13050
1,199	-6.390	1.14890	-,14500	.05360	.02950	.01630	.64000	.05520	1,04020	48950	2.12500
1,100	-6.250	1,14570	14070	.02890	.02300	.01160	.03860	.05780	1,03770	,48690	2.13100
1.199	-4,130	1.15240	13900	.00510	.01620	.00770	.05760	.05860	1,04420	.48690	2,13540
1.199	-2.030	1.16690	14290	01480	.01010	.00420	.03710	.06030	1.05750	.49470	2.13770
1,199	,060	1,16940	14240	03240	.00450	Decep.	.03760	.06120	1,05960	.49610	2.13550
1,199	2,160	1,17100	14 26 0	05240	00150	.00060	.03660	.06130	1.06140	.49600	2.13990
1,199	4,270	1,17390	-,13970	07330	00760	00310	.03630	.06110	1,06410	.49690	2.14120
1,109	6.440	1.17080	13810	09570	01420	~.00770	.03730	.05900	1.06080	,49670	2.13560
1,199	6,490	1.17550	13890	-,11560	02050	01390	.03840	.05790	1,06470	.49960	2,13070
1.199	10.500	1,17700	14200	13540	02790	01820	.03710	.05750	1,06660	.49900	2,13730
1.199	.060	1,16560	14190	03350	.00450	.00100	.03750	.06070	1,05630	.49430	2,13680
	GRADIENT	.00224	-,00005	00926	00282	00120	00015	,00027	.00208	\$8000.	.00066
		RUN N	40. 93/ O	RN/L =	7.04 GR	DIENT INTER	VAL = -5.0	0/ 5.00			
HACH	BETA	CN CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	6	L/D
1.957	-10,470	.61980	12500	.09760	.02990	.01410	.04250	.02850	.74010	.35510	2.08390
1.957	-8,450	.83840	12750	.07560	.02470	.01200	.04200	.02870	.75710	.36250	2.08840
1,957	-6.330	.64380	-,12880	.05230	.01890	.01040	.04130	.02890	.76230	.36400	2.09390
1.957	-4.170	.84980	-,13040	.02590	.01350	.00880	.04100	.02860	.76790	.36620	2.09650
1.957	-2.076	.85400	-,12920	.00500	.00820	.00640	.04110	.02830	.77170	.36800	2.09660
1.957	.050	.85780	12610	01930	.00320	00290.	.04140	.02770	.77500	.37010	2.09400
1,957	2.170	.86150	12890	04140	00180	~.00140	.04070	.02760	.77860	.37090	2.09910
1.957	4.260	.86330	12990	~.06380	00690	00460	.03990	.02870	.78060	.37090	2.10430
1,957	6.450	.86170	12930	08980	01230	00770	.04040	00000	.77900	.37070	2.10100
1.957	8.540	.86240	12820	11380	01800	00960	.04080	.02880	.77940	.37140	2.09830
1.957	10.580	. 85990	- 12630	- 138en	- 89700	- 04400	04455			-	

GRADIENT

.00145

MSSS (FAS) HAR ATP CRB (BICIDIFIHI) (MIEI)

(R76206)

REFERENCE DATA		

	REFEREN	CE DATA							PARAMETRIC	DATA	
MET =	7,4190 80	. IN. 104R	P = 3	.4530 IN.				ALPHA ×	20,000	CONFIG =	2.000
REF u	2,1020 IN	. YMR	PE	.0000 IN.				ELEVTR #	.000	OBDELY =	.000
HEF =	4,0300 IN	. ZMR1	P =	.0000 IN.				IBDELY =	.000	AILRON =	.000
KALE =	.0040							CBOATL =	.000	TROATL =	.000
		RUN	NO. 15/	0 RN/L =	4.12 GR	NDIENT INTE	RVAL = -5.0	0/ 5.00			
MACH	BETA	CN	CLM	CY	CYN	CBL,	CAF	CAB	α.	œ	L/D .
2,990	-10,140	.61990	-,079\$G	.08480	.02480	.01060	,04960	.01450	.55850	.27350	2.04160
2,990	-4,210	.62700	00360	.06540	.02010	.00660	.04800	.01470	.56570	.27470	2.05680
2,890	-6,140	.63250	-,08600	.04590	.01540	.00700	.04660	.01470	.57120	.27550	2.07330
2.990	-4.060	.63730	08790	,02540	.01090	.00520	.04580	.01470	.57600	.27650	2,08310
2.190	-2.030	.64000	08960	.00465	.00820	.00320	.04490	.01450	.57880	.27670	2.09180
2.990	.010	.64340	06690	01360	.00160	.00130	.04420	.01430	.58220	.27740	2.09880
2.990	2,060	.44550	08910	03430	00210	00060	,04470	.01430	.58390	.27860	2.09560
2,890	4,110	.64840	00910	05340	00660	00270	.04600	.01460	.58620	.28090	2.08620
2,990	4.210	.64980	08910	07390	01180	00470	.04680	.01480	.58720	.28220	2.08030
2.990	8.220	.64810	-,08570	09370	01610	00890	.04810	.01490	.58510	.28260	2.06880
2.990	10.190	.64540	06500	11250	02070	00690	.04900	.01490	.58220	.28260	2.05990
	GRADIENT	.00135	-,00009	00959	00211	00096	.00001	00002	.00124	.00052	.00049
		RUN	NO, 16/	O RN/L =	4.82 GRA	DIENT INTE	RVAL = -5.04	0/ 5.00			
MÁCH	BETA	CN	QLM	CY	CYN	CBL	CAF	CAB	CL.	Ф	L/D
4.959	-10,000	.49200	05740	.05880	.01980	.00890	.05110	.00320	.44050	.22500	1.95710
4.959	-6,100	.49730	05640	,04560	.01620	.00810	.04900	.00360	.44620	.22500	1.98250
4.959	-6.060	.50440	05600	.03190	.01220	.00660	.04730	.00370	,45340	.22610	2,00520
4.959	-4.050	.50750	05970	.01720	.90870	.00530	.04590	.00390	.45680	.22590	\$,02200
4.959	-2.010	.51260	-,06170	,00240	.00470	.00310	.04440	.00390	.46200	.22640	2.04080
4.959	.000	.5152B	06170	01170	.00180	.00120	.04390	.00390	.46460	.22690	2.04780
4,959	2.030	.51790	-,06210	-,02750	00200	00120	.04440	.00390	.46700	.22830	2.04510
4.959	4,050	.51950	-,05980	03950	-,00580	~,00310	.04530	.00400	.46810	.22970	2.03780
4.959	6.110	.51610	06120	05540	00990	00510	.04670	.00400	.46640	.23050	2.02330
4.959	8,120	.51550	-,05790	06900	01320	00670	.04610	.00410	.46330	.23000	2.00660
4.959	10.060	.51300	05730	00270	01710	00800	.05010	.00410	.46040	.23180	1.98590
	GRADIENT	.00145	- : 00003	BBY09	: 00122	- 00104	- 60000	20004			

-.00104 -.00006

.00001

.00137

.00047

.00177

-.00109 -.00177

MSSS (FAS) HAR ATP CRB (B1C1D1F1H1) (ME1)

(R76207) (03 NOV 72)

MENERACE DATA	
---------------	--

-.00612

-.00183

-.00179

.00002

.00003

.00127

.00083

.00015

PARAMETRIC DATA

									PARAMETRIC	C DATA	
SREF W	7.4190 80		•••	530 IN.				ALPHA =	30,000	CONFIG =	2,000
LREP N	2,1020 [000 IN.				ELEVTR =	.000	OBDELY =	.000
BREF W	4,0300 11	4. ZHRP	• .0	000 IN.				180ELV =	.000	AILRON =	.000
SCALE =	.0040							CBDAIL =	.000	IBDAIL =	.000
		RUN	NO. 14/0	RN/L =	4.12 GR/	ADIENT INTE	RVAL = -5.0	00/ 5.00			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	_	
2.990	-10.110	1.02670	12260	.06420	.02660	.01900	,04580	.01380	.84430	CD.	L/D
2,990	-8,170	1.03430	12570	.04610	.02210	.01620	,04370	.01420	.85180	.58590	1,44080
2.990	-6,120	1.03690	12740	.02730	.01750	.01320	.04220	.01440		.58840	1.44760
2.990	-4.070	1.04690	13010	00890	.01300	.00980	.04110	.01440	.65640	.58960	1.45250
2.490	-2,010	1.05120	13300	00930	.00810	.00600	.04060	.01450	.86370	.59300	1.45640
2,990	.020	1.05560	-,13290	02470	.00330	.00220	.04050	.01460	.86750	.59500	1.45800
2,990	2.090	1.05670	15300	04210	00170	00160	,04060	.01460	.87130	.59730	1.45860
2,390	4,120	1,05810	13320	05960	-,00700	00560	,04070	.01450	.67210	.59800	1.45840
2,990	6.190	1.05920	13050	07460	01190	-,00950	.04140	.01440	.87330	.59880	1.45830
2.990	6,220	1.05610	-,12630	09300	-,01650	01290	.04220	.01470	.87380	.60010	1.45590
8.490	10,170	1.05220	12590	11200	02100	01610	,04310		.87070	.59910	1.45340
	GRADIENT	.00136	000030	00829	-,00243	00167	00004	.01480	.86700	.59770	1.45040
					100010	-100101	-,00004	.00001	.00116	.00071	.00021
		RUN I	15 / 0	RN/L =	4.85 GRA	DIENT INTER	VAL = -5.0	G/ 5.00			
MACH	BETA	CN	CL,M	CY	CYN	CBL	CAF	CAB	-	_	
4.959	-10.010	.87730	09490	.04410	.02000	.01790	.05090	.00230	Cr	6	L/0
4.959	-6,090	.68850	09620	.03000	.01680	.01530	.05090	.00230	.72050	.50310	1,43210
4,959	-6,050	.69670	09690	.01750	.01310	.01240	.04820	.00300	.73040	.50830	1.43700
4.959	-4.020	.90140	09820	.00340	,00970	.00930	.04730	.00330	.73830	.51120	1.44430
4.959	-2.000	.90610	09940	00950	.00610	.00570	.04730	.00340	.74280	.51290	1.44800
4.959	.010	.91060	10040	02190	.00260	.00220	.04730		.74680	.51540	1.44900
4.959	2.050	.91230	09980	03310	00100	00150	.04710	.00350	.75060	.51770	1,44960
4.959	4.050	.91370	10210	04660	00520	00520	.04760	.00350	.75210	.51860	1.45030
4.959	6.110	.91260	09950	05850	00860	00520	.04760	.00360	.75300	.51970	1.44890
4.959	8.120	.90820	10050	07260	01250	01190	.04870	.00350	.75170	.51980	1.44610
4.959	10.040	.90740	09650	08510	01610	01190 01450	.04870	.00370	.74780	.51770	1.44450
	GRADIENT	.00155	00041	00612	00183	00179	.04890	.00370	.74700	.51740	1.44360

9,980

GRADIENT

1,68220

.00069

-,19000

.00037

-.04380

-.00547

-.01930

-.00166

-.02470

-.00266

.04230

-,00013

.00318

-.00002

1.01150

.00052

1,34470

.00047

.75230

.75220

.00012

MSSS (FAS) MAR ATP CRB (BSCSDSFSMS) (WES)

(R76208) 1 03 NOV 72)

							-				- · · · ·	
	REPER	ENCE DATA							PARAMETRIC DATA			
SAEF +	7,4190		-	.4530 IN.	•			ALPHA =	50.000	CONFIG =	2,000	
LREP =	2,1020			.0000 IN.				ELEVIR =	.000	CBDELV =	.000	
BREF =	4.0300	IN. ZHRI	• •	.0000 IN.	•			IBDELY =	.000	AILRON =	.000	
SCALE =	.0040							CBDAIL =	.000	IBDAIL =	.000	
		RUN	NO. 201/	O RN/L =	4.15 GR	ADIENT INTE	RVAL = -5.0	00, 5.00				
MACH	BETA	CN	CLM	CY	CYN	CBL.	CAF	CAB	σ.	œ	L/D	
2.990	-10,070	1.76260	16710	.07420	.01870	.02450	.03630	.01330	1,05180	1.41510	.74320	
2,990	-8,150	1.77560	19100	.06160	.01420	.02040	.05540	.01340	1,06030	1.42500	74400	
2.000	-6,120	1,78690	19380	.04930	01020	.01570	,03450	.01360	1.06760	1,43330	.74480	
8,990	-4,070	1,79250	-,19250	.03700	.00630	.01100	.03400	.01330	1.07120	1,43760	.74510	
2,990	-2,040	1,79740	-,19410	.02530	.00190	.00640	.03360	.01330	1.07450	1,44120	.74550	
2,990	.000	1,79900	-,19550	.01450	00210	.00000	02550.	.01340	1,07570	1,44230	.74580	
2,990	8.050	1,79740	-,19440	,00220	00620	00430	.03350	.01330	1,07460	1.44120	,74560	
2,990	4,030	1.79420	-,19210	00900	-,01050	-,00910	. 033 90	.01350	1.07230	1.43890	.74520	
#.99G	6,110	1,78700	-,18940	-,02360	01480	01380	.05560	.01340	1,06820	1.45300	.74540	
2,990	8,140	1.77940	18980	03660	01930	-,01840	.03430	.01330	1.06310	1,42730	.74480	
2.990	10,060	1.77050	18220	04860	02340	02300	.03460	.01550	1,05750	1.42040	.74450	
	GRADIENT	.00017	.00002	-,00568	00206	00251	-,00002	.00002	.00011	.00013	.00002	
		RUN	NO. 202/	D RN/L =	4.89 GR	ADIENT INTER	RVAL = -5.0	0/ 5.00				
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	c	L/D	
4.959	-10.000	1,67770	19480	.06620	.01450	.02480	.04670	.00250	1,00550	1,34360	.74820	
4.959	~6,090	1.68530	19500	.05550	.01150	.02050	.04560	.00280	1.01100	1.34910	.74930	
4.959	-6,070	1.69610	19610	.04600	.00800	.01560	.04420	.00300	1.01870	1,35680	.75080	
4.959	~4.050	1.70080	19760	.03370	.00460	.01040	.04320	.00300	1.02240	1.35990	.75170	
4.959	-2.020	1,70520	19870	.02430	.00100	.00510	.04360	.00310	1,02470	1,36370	.75140	
4.959	~,020	1.70850	19660	.01200	00190	-,00040	.04370	.00300	1,02670	1.36630	.75140	
4.959	2,010	1.70800	19870	.00090	~.00560	00580	.04260	.00290	1.02720	1.36520	.75230	
4.959	4,020	1,70640	19410	00970	C880 0. -	01090	.04240	.00290	1.02640	1.36390	.75250	
4.959	6.080	1.70060	19420	02060	01250	01570	.04220	.00300	1,02300	1.35930	.75260	
4,959	9,080	1.69270	19090	03090	01590	02030	.04240	.00300	1.01790	1,35310	.75230	

M599 (FAS) NAR ATP ORB (BICIDIFINI) (WIEI) (VIKIRI)

(R76301) (03 NOV 72)

-		
	ぜんていくと	DATA

	REPERE	NCE DATA							PARAMETRIC	DATA	
SPEF =	7,4190 8	Q.IH. XHR	P = 1	3.4530 [N.							
LREF .	2.1020 H	N. YHR		.0000 IN.				BETA =	.000	CONFIG =	3.000
GREF =	4.0300 t			.0000 IN.				RUDDER =	.000	RUDFLR =	10,000
SCALE =	.0040		•	rado fu				ELEVIR *	.000	OBDELY =	.000
	•							IBOETA =	.000	ÁILRON =	.000
								CBDAIL =	.000	IBDAIL =	.000
		RUN	NO. 55/	0 RNAL E	4.96 GR	ADIENT INTE	RVAL = -5.0	00, 5,00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	α.	_	
.595	.660	-,03220	.02500	01750.	00260	.00250	.02740	.02300	03250	Q	1/0
. 595	2,660	.05960	.01930	.02370	00200	.00280	.02700	.02230	05830	.02780	-1.20490
.699	4.780	.15240	.01260	.02270	00140	.00300	.02160	.02300	.15010	.02970	1.96120
.598	6.660	.25390	. 00640	.01980	00100	.00290	.01560	.02240	.25020	.03420	4.37600
.898	0.990	39600	00800	.01960	-,00140	.00290	.01050	.02270		.04600	5,43570
.595	11,100	.46900	~,01770	.01700	00100	.00340	.00670	.02400	.35198	.06630	5.30350
.595	13,200	.57090	~.03120	.01490	00120	.00260	.00400	.02530	.45890	.09690	4.75210
.895	15,290	06890.	03400	.01230	00110	.00330	.00130	.02950	.55480	.13430	4,12900
.895	17.440	.75920	03740	.01050	-,00180	.00420	-,00130	,03430	.64490	.17770	3.62630
.595	19,480	.63600	03690	.00950	00260	.00340	00330	.04030	.72470	.22630	3,20200
.595	21.490	.88250	03250	.00910	00250	.00030	00120	.04400	.78930	.27570	2.86220
.595	11,100	.46870	01690	.01690	00110	.00320	.00700	.02420	.82160	.32210	2.55010
	GRADIENT	.04501	00298	00107	.00029	.00012	00143	.00000	.45860	.09720	4.71470
								.00000	.04452	.00176	1.35907
		RUN	NO. 56/	O RN/L =	6.29 GR	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	Q.	_	
.900	.630	08430	.05530	.02890	~.00340	.00060	.03410	.02590	08470	6 0	L/D
.900	2,700	.02590	.04360	.02540	00290	.00130	.03230	.02550	.02440	.03320	-2.55180
.900	4.930	.14650	.03250	.02350	00280	00160	.02670	.02530	.14370	.03340	.72900
.900	7.140	.27130	.01510	.02070	00280	.00180	.02440	.02500	.26610	.03920	3.66190
.900	9,340	.36390	.00410	.01660	00210	.00330	.02430	.02790	.37480	.05800	4.58428
.900	11,540	.50230	01010	.01060	00080	.00498	.02510	.03140	.48710	.08630	4.34060
.900	13.750	.62550	02690	.00360	.00010	.00660	.02570	.03440	.60150	.12510	3.89170
.900	15.920	.72800	03620	00420	.00180	.00720	.02730	.04020	.69250	.17370	3.46180
.900	18,160	.63170	03860	00110	00090	.00470	.02740	.04590	.78170	.82600	3.06340
.906	20,280	.89340	02400	.00980	00320	00450	.03190	.05390	.82690	.28530	2.73970
.900	22,270	.91120	01290	00020	.00020	00090	.02370	.06140	.83420	.33970	2.43380
.900	11,540	.50130	01110	.01160	00100	.00450	.02390	.03130	.48640	.36730	2.27090
	GRADIENT	.05368	-,00484	00125	.00014	.00023	00173	00014	.05312	.12370	3.92990
								.00014	*0991S	.00141	1.44338

GRADIENT

.03613

~,00670

-.00096

.00009

-.00005

.00003

-.00001

.03677

.00360

.45242

MSSS (FAS) HAR ATP ORB (BECEDIFENE) (MEET) (VEKERE)

BICIDIFINE) (MEEL) (VEKIRE) (RT630E) (03 NOV 72)

						cross energy			187431	JE) (US PI	D4 7E)
	REFEREN	CE DATA							PARAMETRIC	DATA	
SAEP .	7,4190 80			550 IN.				BETA =	.000	CONFIG =	3,000
LREP #	2.1020 IN	•		000 IN.				RUDDER =	.000	RUDFLR =	10,000
BREF *	4.0300 IN	. ZHRP	, = '0	1000 IN.				ELEVTR =	.eee.	CEDELY =	.000
SCALE =	,0040							IBDELV =	.000	AILRON =	.000
					•			CBDAIL =	.000	IBDAIL =	.000
		RUN	NO. 57/ 0	RN/L =	6.70 GR/	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	ON .	CLH	CY	CÝN	CBL	CAF	CAB	CL.	69	L/O
1,197	.760	-,00930	.05010	.02070	00200	.00260	.06180	.04560	01020	.06170	16550
1.197	2.690	.11750	.01770	.01900	00150	.00260	.06140	.04610	.11430	.06720	1,69940
1.197	5.170	.25450	-,01540	.01610	00060	.00230	.06360	.04220	.24770	.08620	2.87130
1,197	7,450	.39070	-,04610	.01160	.00000	.00260	.06300	.04110	.37930	.11300	3,35410
1.197	9,680	.51990	-,07100	.00760	.00100	.00230	.06240	.04180	.50200	.14890	3.37020
1,197	11.930	.64910	09360	.00290	.00160	.00180	.06210	.04338	.62220	.19500	3,19030
1,107	14,190	.77690	11430	~,00060	.00180	.00240	.06270	,04520	.73780	.25140	₹.93490
1,197	16,420	.67630	11920	00570	.00300	.00450	.06290	.04960	.82270	.30800	07078.5
1,197	18,690	.97680	12350	00590	<i>0e</i> 000.	.00170	.06350	.05410	.90490	.37320	2,42440
1,197	20,900	1,08390	-,13598	00670	,00030	.00230	.06180	.05550	.99060	.44440	2,22870
1,197	22,960	1,15500	13280	00840	.00000	.00350	.05820	.05780	1,03870	.50390	2,06120
1,197	11,940	.65310	09430	.00310	.00140	.00190	.06200	.04510	.62610	.19590	3.19580
	GRADIENT	.06009	01536	00081	.00024	-,00009	00019	.00024	.05900	.00261	.88384
		RUN I	NO, 68/ 0	RN/L =	7.03 GRA	DIENT INTER	VAL = -5.00	0/ 5.00			
MACH	ALPHA	CN	QLM	CY	CYN	CBL.	CAF	CAB	α r	6	L/D
1,965	.710	.01780	00530	.01740	00020	.00110	.06710	.02530	.01700	.06740	.25260
1.965	2.790	.09760	01940	.01560	.00010	.00080	.06550	.02650	.09430	.07020	1,34300
1,965	4.990	.16100	03400	.01350	.00020	.00090	.06720	.02530	.17440	.08270	2,10690
1,965	7.180	.26100	04680	.01070	.00110	.00070	.06620	.02660	.25070	.09840	2,54750
1.965	9.350	.33700	05840	.00870	.00160	.00090	.06490	.02730	.32190	.11880	2,70970
1.965	11.530	.41500	07000	.00620	,00210	.00120	,064 08	.02630	.39380	.14570	2.70230
1.965	13.740	.49710	06110	.00490	.00230	.00170	.06280	.02610	.46790	.17920	2.61080
1.965	15,900	.57330	08930	.00220	.00216	.00200	.06080	.02680	.53470	.21570	2.47860
1.965	18,110	.64418	09140	00050	.00200	.00280	.05840	.02660	.59400	.25580	2.32150
1,965	20,290	.72700	10160	-,00470	.00260	.00350	.05610	.02660	.66240	.30490	2,17250
1.965	22,380	.60160	-,10790	00800	.00330	.00440	.05500	.02770	.72110	.35440	2,03430
1,965	11,520	.41160	06710	.00660	.00190	.00100	.06340	.02650	.39080	.14450	2,70450
	CDADIENT	DEALE	- Other	- 00000		-					

MSSS (FAS) NAR ATP CRB (BICIDIFINI) (WIEI) (VIKIRI)

MEF	ENEMLE	UNIA

PARAMETRIC DATA

BREF *	7.4190 80	2.1N. XHRF	. E 5.4	530 IN.				BETA =	.000	CONFIG =	3.000
LREP .	2.1020 II	4. YHRF		000 IN.				RUDDER =	.000	RUDFLR =	10.000
erey =	4.0300 [4. ZMRP		000 IÑ.				ELEVTR =	.000	OBDELY =	.000
SCALE =	.0040							IBDELV =	.000	AILRON =	.000
								OBDAIL =	.000	IBDAIL =	.000
									•	100/114	
		RUN	NO. 22/0	RN/L =	4,12 GR	DIENT INTE	RVAL = -5.00	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	CD	L/0
2.990	.660	00880	01700	.00960	De000.	.00000	.06650	.01260	+.00960	.06640	-,14520
2.990	2.610	.04270	02120	.00060	.00070	.00000	.06540	.01310	.03960	.06720	.56960
2.990	4,700	.09630	02430	.00770	.00100	,00000	.06380	.01340	.09070	.07150	1.26930
2.090	9.770	.15490	-,02890	.00620	.00110	.00030	.06230	.01340	.14650	.08020	1,82630
2.990	8,840	.21620	-,03600	.00410	.00120	.00040	,06040	.01360	.20430	.09300	2.19690
2.990	10,920	.27870	04140	.00330	.00110	aeaa a ,	.05880	.01370	.26250	,11060	2.37370
2.990	13.020	.34290	-,04920	.00180	.00110	.00130	.05730	.01360	.32120	,13310	2.41200
2.990	15,100	.40990	05560	00090	.00130	.00150	.05600	.01340	.38110	.16090	2.36780
2.990	17.210	,46090	06230	00260	.00200	.00180	.05420	.01340	.44530	.19410	2.28300
2.990	19.260	.55450	07050	-,00470	.00250	.00190	.05260	.01360	.50610	.23260	2.17560
2.990	21,260	.62700	07910	00680	.00260	.00190	.05100	.01400	.56570	.27500	2.05710
	GRADIENT	.02601	00160	00047	.00003	.00000	00067	.00020	.02482	.00127	.34983
		RUN 1	NO. 21/0	RN/L =	4.85 GRA	DIENT INTER	VAL = -5.00	/ 5.0B			
MACH	ALPHA	ON	CLM	CY	CYN	CBL	CAF	CAB	CL.	CO.	L/D
4,959	.660	03100	01930	.00790	.00070	00010	.08050	.00260	03170	.06020	52760
4.959	2.590	.00710	02130	.00610	.00080	.00000	.05770	.00290	.00450	.05800	.07770
4.959	4,620	.04730	02270	.00800	.00110	.00030	.05670	.00320	.04260	.06040	.70560
4,959	6.670	.08766	02550	.00420	.60110	.00840	.05440	.00340	.08010	,06420	1.24840
4,959	8.680	.13310	02950	.00250	.00150	.00060	.05190	.00350	.12370	.07140	1.73200
4.959	10,720	.18210	-,03150	.00180	.00140	.00080	.04970	.00360	.16970	.08270	2.05010
4.959	12.780	.23440	03310	.00160	.00160	.00110	.04760	.00370	.21800	.09830	2.21740
4.959	14.600	.29960	03910	00018	.00140	.00120	.04620	.00370	.26920	.11890	2.26300
4.959	16.660	.35190	04560	00240	.00170	.00140	.04580	.00380	.32340	.14610	2.21290
4.959	16.690	.41500	04960	-,00310	.00230	. ùo180	.04570	.00380	.37780	.17760	2,12700
4.959	20.860	.48040	~.05640	00540	.00250	.00180	.04590	.00390	.43250	.21400	2.02080
	GRADIENT	.01977	00086	00048	.00010	.00010	00096	.00015	.01876	.00006	.31140
				,							

44.000

GRADIENT

1.64510

.03484

-.02820

-.00072

-.00020

.00089

.00290

-.00013

-.00166

-.00009

-.03260

-.00266

.07560

.00068

1.20610

.01792

1.11930

.03545

1.15010

1.07740

-,05297

MSSS (FAS) MAR ATP ORB (BICIDIFIMI) (WIEI) (VIKIRI)

(R76302) (03 NOV 72)

REFERENCY DATA PARAMETRIC DATA SECT 7.4190 SQ.IN. 10-RP 3.4530 IN. COF16 = BETA * .000 3.000 LRET 2.1020 IN. YHRP .0000 IN. RUDDER = .000 RUDFLR = 10,000 BREF 4.0300 IN. ZHRP .0000 IN. ELEVTR = .000 **CROELY *** .000 SCALE W .0046 IBOELV = .000 ATLEON # .000 CBDAIL = .000 IBOAIL = .000 RUN NO. 32/ 0 RN/L = 5,01 GRADIENT INTERVAL = -5.00/ 5.00 MACH ALPHA CN CLM CY CYN CBL CAF CAR CL Θ L/D .599 22,010 .65700 -.02310 -.00786 .00200 -,00040 -.00070 .04410 .79460 .32060 2.47900 .tee 23.920 .47980 -.01870 -.01280 .00380 .00110 -.00360 .04890 .80570 .35340 2.27950 .599 25.990 .92760 aea**so.**-00000.-.00040 .00150 -.00520 .05210 .83610 .40180 2.08030 .599 26,030 .96910 -.02490 .01480 -.00090 -,00640 -.00750 -05910 .85890 .44890 1,91320 .599 30.100 1.03320 -.03590 .01270 .00740 -.01110 -.00880 .06270 .89830 .51050 1.75950 .599 32,180 1.10780 -.04320 -.00380 .01120 -.00680 -.01360 .06680 .94480 .57840 1.63330 .599 34.290 1,19650 -.04700 -.01580 .00860 .00100 -.01690 .06970 .99810 .66010 1,51200 .599 36,340 1,25970 -.04440 ~.01700 .00690 .00290 -.02300 .07160 1.02830 .72800 1.41250 .599 36,450 1.32550 -.04630 .00630 -.01750 .00160 -.03010 .07400 1.05680 .80070 1.31980 40,500 .599 1.39310 -. D464Q -.01400 .00620 .00020 -.03660 .07480 1.08300 .87700 1,23480 .599 42.490 1.44660 -.04940 -.01110 .00620 -.00110 ~,04430 .07720 1,09650 .94450 1,16090 .599 32,200 1,11780 -.04589 -.00340 .01140 -.00660 -.01320 .06700 .58440 .95290 1.63030 GRADIENT .03060 -.00166 -.00065 .00027 .00013 -.00205 .00162 .01640 .03139 -.06297 RUN NO. 31/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5,00 MACH ALPHA CN QМ CY CYN CBL CAF CAB CL. Ф L/D .901 22.790 .91630 -.00910 -.00810 **.002**90 -,00030 .02180 .06280 .83630 .37510 2.22930 .901 24,810 .98286 -.01260 ~,00950 .00350 .00060 .01910 .06560 ,88400 .42980 2.05660 .901 26.970 1.06600 -.02510 -.01000 .00520 .00000 .01670 .06760 .94420 .49930 1.89090 .901 29.170 1,16820 -.03830 -.61770 .00880 .00220 .01680 .06790 1.01170 .58450 1.73160 .901 31,300 1.25250 -.03870 -.03400 .01250 .00830 .01190 .07020 1.06400 .66100 1.60960 ,901 33,470 1.33900 -.04420 -.03860 .01270 .01120 .00750 .07130 1.11270 .74480 1.49360 .901 35,610 1.42050 -.04700 -.03330 .00960 .01260 .00000 .07870 1,15470 .82730 1,39570 200. 37.740 1,47980 -.03340 -.01170 .00550 .00620 -.01010 .07650 1.17630 .89780 1,31010 .901 39.890 1.52430 -.02880 .01720 .00020 -.00380 ~.01840 .07710 1.18120 .96350 1.22580 .401 41.970 1.57650 --.02810 .00970 .00270 -.00500 -.02660 .07690 1.18980 1.03450

.00004

.02489

.03375

-.04621

MSSS (FAS) NAR ATP ORB (BICIDIFINI) (WIEI) (VIKIRI)

(RF6302)

								•	(8183)	ve) (us w	KW AS)	
	REFERENCE DATA								PARAMETRIC DATA			
GREF =	7,4190 \$.4530 IN.		-		BETA =	,000	CONFIG =	3.000	
LREF #	2,1020 (I		•	.0000 th.				RUDDER =	.000	RUDFLR =	=	
BRET .	4.0300 (1	N. ZMRI	• • .	.0000 tN.				ELEVIR =	.000	CBDELY =	10,000	
SCALE =	.0040							TBDELV 2	.000	AILRON =	.000	
								CBDAIL =	.000	IBDAIL =	.000 000	
•		RUN	NO. 30/	0 RN/L =	4.11 GRA	DIENT INTER	RVAL = -5.0	90/ 5.00			,,,,,	
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	610	-			
2.990	21,800	.61630	07810	-,00580	.00310	.00180	.05050	CAB	CL.	Ф	L/O	
2.990	23.770	.69210	08880	00820	.00360	.00100	.04880	.01340	.55520	.27660	2.00700	
2.990	25,690	77160	09690	01130	.00410	.00200	.04750	.01410	.61370	.32370	1,89540	
2.990	27.990	.85560	10560	~.01340	.00470	.00220	.04610	.01420	.67340	.37970	1.77320	
2.990	0e0,0\$.94150	-,11480	01460	.00450	.00270	.04490	.01440	.73380	.44240	1.65880	
2.990	32.200	1,02890	-,12460	01520	.00310	.00400	.04360	.01450	.79200	.51100	1,54970	
2.990	34,310	1,11690	13430	01510	.00550	.00520	.04310	.01450	.64730	.58520	1.44770	
2.990	36.420	1,20860	14560	-,01930	.00230	.00570	.04200	.01450 .01460	.89980	.66640	1.35020	
2.990	38.570	1.30160	-,15560	02490	.00400	.00490	.04110		.94750	.75140	1,26100	
2,990	40,640	1.38810	-,16320	02930	.00540	.00430	.04050	.01440 .01430	.99190	.84370	1.17550	
2.990	42,660	1.47020	17180	03160	.00560	.00420	.03960	.01410	1.02698	.93490	1.09630	
	GRADIENT	.04122	-,00455	00116	.00005	.00017	00051	20000	.02442	1.02550 .03619	1,02790 04708	
		RUN.	NO. 29/	G RN/L =	4.61 GRAI	DIENT INTER	VAL = -5.0	0/ 5.00				
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB		_		
4.959	21.420	.49970	05390	00720	.00270	.00210	.04710	,00260	CL	0	L/D	
4.959	23,350	.56760	06050	00900	00290	.00210	.04710	.00200	.44790	.22640	1.97810	
4.959	25,430	.64510	07000	01300	.00290	.00230	.04730	.00320	.50248	.26830	1.87240	
4.959	27,480	.72210	07810	01490	.00270	.00260	.04740	.00350	.56040	.31890	1,75740	
4.959	29,540	.80430	~.08610	01560	.00310	.00320	.04820	.00360	.61860	.37530	1.64620	
4.959	31.600	.88410	09530	01680	.00320	.00350	.04820	.00360	.67590	.43860	1.54100	
4.959	33,660	.97140	10710	01920	.00340	.00380	.04860	.00360	.72770	.50440	1.44250	
4.959	35,720	1.05580	11980	02320	.00360	.00360	.04830		.78140	.57900	1.54960	
4.959	37,620	1.14500	-,13050	02500	.00420	.00400	.04850	.00350 .00350	.82890	.65570	1.26410	
4.959	39.860	1,23080	14390	~,02840	.00450	.00400	.04720	.00360	.87460	.74050	1.18090	
4.959	41,820	1,31500	15460	03020	.00500	.00430	.04670	.00350	.91430	.82520	1,10790	
	GRADIENT	.04017	00497	00110	.00011	.00011	.00002	.00004	.94870	.91180	1.04040	
								. OUUUH	.02489	.03375	- 54634	

MSSS (FAS) MAR ATP ORB (BECEDIFINE) (MIEE) (VEKERE)

(R76303) (03 NOV 72) REFERENCE DATA PARAMETRIC DATA

									PARAMETRIC	. DATA	
SAEF =	7,4190			30 IN.			,	BETA =	.000	CONFIG =	3.000
LREF =	2,1020		•	XX 14.				RUDDER 2	.000	RUDFLR =	10,000
BREF .	4,0300	IN. ZHR	.00	300 IN.				ELEVTR =	.000	CODELY #	.000
SCALE .	.0040							IBDELV =	.000	AILRON =	.000
			•					OBDAIL #	.000	IBDAIL =	.000
		 .						•			
		RUN	NO. 197/ G	RN/L =	4,15 GR/	שואו זאפוסי	RVAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	GLM	CY :	CYN	CBL	CAF	CAB	ar.	co ·	L/0
2,990	42.020	1.42300	16170	.00950	.00000	.00120	.03750	.01230	1,03240	.96110	1.05230
2,990	45.970	1.50520	16910	.01076	00050	.00120	.03720	.01240	1,05740	1.07180	.98650
2,990	46,030	1.58250	-,17340	.01220	00050	.00110	03710	.01250	1.07190	1,16480	.92010
2,690	46,110	1,65410	17830	.01240	00000	.00110	.03630	.01280	1,07730	1,25560	.85790
2.990	50,160	1.72660	-,18470	.01420	00130	.00120	.03540	.01290	1,07880	1,34880	.79980
5,990	52,220	1.79250	18840	.01680	00130	.00160	.03500	.01290	1,07040	1,43830	.74420
2,990	54,270	1,84940	-,19010	.01730	00130	.00160	.03360	.01300	1.05250	1,52100	.69200
2,990	56,290	1,90030	-,19000	,01890	-,00140	.00130	.05220	.01270	1.02760	1.59890	,64260
R.990	56,370	1.94240	19020	.01810	00170	.00120	.03070	.01270	.99230	1,67010	.59410
£.990	60,390	1.98330	19060	.01870	00170	.00100	.02950	.01280	.95420	1,73890	.54870
2,990	62,350	2,01740	19130	.02000	00170	.00110	.02610	.01320	.91100	1,60020	50600
	GRADIENT	.02925	-,00140	.00053	-,00008	-,00000	~.00048	.00003	-,00615	.04065	02669
		RUN	NO. 196/ G	RN/L =	4.92 GRA	DIENT INTER	VAL = -5.00)/ 5.00			
MACH	ALPHA	CH CH	CLM	CY	CYN	CBL	CAF	CAB	CL.	00	L/D
4.959	41.510	1.30500	15210	.01180	00088	.00270	.04690	.00240	.94610	.90010	1.05100
4,959	45,440	1,38500	16140	.01460	-,00060	.00270	.04620	.00260	,97370	.98600	.98750
4,959	45,480	1.46820	17450	.01450	00130	.00240	.04480	.00200	.99740	1,07830	.92490
4.959	47.580	1,54880	~.16400	.01500	05000	.00260	.04450	,00290	1,01280	1,17270	.86360
4.959	49,570	1,62490	19050	.01760	00090	.00270	.04340	.00280	1.02060	1,26510	.80670
4,959	51.600	1.69650	19810	.01640	00120	.00220	.04280	.00290	1.02010	1,35630	.75210
4.959	55.630	1.76440	20370	.01910	00130	.00240	.04150	.00290	1.01270	1.44540	.70060
4.959	55.640	1.83100	-,21370	.01790	00130	.00260	.04000	.00280	1,00020	1.53410	.65190
4.959	57.710	1,69060	21790	.01950	-,00130	.00260	.03950	.00260	.97640	1.61940	.60290
4.959	59.710	1,93800	21750	.01940	~,00190	00290	.03820	.00270	.94420	1.69280	.55770
4.959	61.670	1,97770	21770	.01968	00190	.00290	.03710	.00260	.90550	1.75860	.51480
	GRADIENT	.03387	00339	.00037	00005	.00001	00048	.00000	-,00187	.04329	-,02646

-.02646

GRADIENT

.00216

.00053

-.01741

.00187

-.00087

-.00069

MSSS (FAS) MAR ATP ORB (BICIDIFINI) (WIEI) (VIKIRI)

(03 NOV 72)

											~ ,
	REFERE	ATAD 33H							PARAMETRIC	DATA	
ener =	7,419G 8	Q. IN. WARP	* 3,4	1530 tH.				ALPHA =	.000	CONFIG =	3,000
LREF =	2,1020 [N. YHRF	. = .	0000 IN.				RUDDER =	.000	RUDFLR =	10,000
	4,0500 11	N, ZMRF		1000 IN.				ELEVTR =	.000	OBDELY =	.000
SCALE =	.0040				•		•	180ELV =	.000	AILRON =	.000
							•	CBOATL =	.000	IBDAIL =	.000
		RUN	NO. 77/ (RN/L =	4.98 GR	ADIENT INTER	VAL = -5.0	0/ 5,00			
MACH	BETA	CN	CUM	CY	CYN	CBL	CAF	CAB	a.	œ	L/0
.998	-10,060	01790	.00960	.15620	01120	.00450	.02160	.02470	01790	.02170	62350
.598	-6,150	-,01670	.01330	.12890	01110	.00630	.02420	.02380	01660	.02430	68560
.598	-6,100	01490	.01716	.19040	~ .0092 0	.00650	.02640	.02310	01480	.02640	56250
.395	-4.060	01030	.02150	.08880	00640	.00610	.02710	.02300	01030	.02710	0.0000
.596	-2.030	00400	.02360	.03260	00320	.00520	.02840	.02200	-,00400	.02840	14120
.598	.000	00790	.02670	.00280	00060	,00450	.02790	.02280	00788	.02790	28190
.598	2.030	00120	.02750	-,03040	.00290	.00370	.02560	.02440	00120	.02560	~.04760
.596	4,040	.00560	.02650	06300	.00600	.00200	.02160	.02730	.00590	.02180	.27060
.596	6,140	.01370	.02550	~.09920	.00940	.00040	.02020	.02780	.01370	.02010	.68100
.596	8,150	.01960	.02330	-,12820	.01140	-,00010	.01880	.02810	.01960	.01880	1.04410
,898	10.090	.02520	.01980	15910	.01190	00020	.01660	.02960	.02320	.01660	1.39660
.598	,000	-,00420	.02840	.00280	00040	.00420	.02790	.02280	00410	.02790	14840
	GRADIENT	.00173	.00067	01590	.00153	00048	00066	.00054	.00174	00066	.06888
		RUN I	NO. 78/ 0	RN/L =	6.30 GR	ADIENT INTER	VAL = -5.00	0/ 5.00			
MACH	BETA	ON	CLM	CY	CYN	CBL	CAF	CAB	CL.	œ	L/D
.906	-10,240	06930	.03490	.17690	01230	.00350	.02810	.02990	06920	,02840	-2.43400
.906	-8,260	06450	.04090	.14590	01330	.00800	.03040	.02880	06440	,03070	-2.10000
.906	-6.190	05910	.04510	.11100	~.01110	.00640	,03250	.02690	05900	.03270	-1.80290
.906	-4.120	05340	.04990	.07640	00850	.00630	.03360	.02620	05330	.03380	-1.57730
.906	-2.060	05620	.05510	.05350	00280	.00430	.03650	.02540	05610	.03660	-1.53140
.906	.000	-,05230	.05690	.00360	00050	.00500	.03510	.02540	05228	.03530	-1.47910
.906	2,070	04250	.05590	05570	.GG540	.00000	.03270	.02630	04250	.03280	-1.29270
,906	4,110	03800	.05490	06930	.00770	~.00100	.02840	.02970	03800	.02850	-1.33330
.906	6.220	03700	.05260	10650	.01090	00220	.02670	.03160	03700	.02680	-1.37860
.906	8.270	03050	.04850	13980	.01290	00240	.02340	.03370	03050	.02340	-1.29950
.906	10.260	02950	.04450	17200	.01300	00120	.02230	.03570	02940	.02230	-1.31590
.906	.000	04890	.05550	.00290	00070	.00290	.03540	.02470	04880	.03550	-1.37410
	CRACTENT	finate.	2005	- 64 - 44							

.00038

.00215

-.00070

10,470

GRADIENT

.000

.02690

.03940

.00116

-.00870

-.**c**òana

.00000

-,17420

-.00248

-.01632

.00430

.00040

.00096

-.00130

00000.

-.00047

.06680

.06760

-.00011

.02680

.02470

.00014

MSSS (FAS) NAR ATP ORB (BICIDIFINI) (WIEI) (VIKIRI)

(R76304)

.02700

.03950

.00117

.08680

.06760

-.00010

.40420

.58460

			41. CKD (D1.		TERS (ATMIKE)	l	(R763)	04) (03 N	OA 45)		
REFERENCE DATA				*. •				PARAMETRI	C DATA		
SALF .	7,4190 60			4530 IN.			•	ALPHA =	.000	CONFIG =	3.000
LREF *	8,1020 II			0000 IN.				RUDDER =	.000	RUDFLR =	10,000
BREF =	4,0500 19	4. 2MR	P = _(0000 IN.				ELEVIR =	.000	CROELY =	.000
RCALE .	49040							18DELY =	.000	AILRON =	.000
								OBDAIL =	.000	IBOAIL =	.000
		RUN	NO. TOY	D RNVL #	6.69 GR	WIENT INTER	RVAL = -5.0	0/ 5.00			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	œ	L/D
1.201	-10,340	03800	.04230	00581,	~.01220	.01560	.05890	.04396	03780	.05900	64150
1.201	-8,350	-,02630	.04540	.14420	-,01150	.01530	.05990	.04380	-,02620	.06000	43690
1.201	-6.250	01320	.04380	.10420	00890	.01340	.06280	.04230	01310	08280.	20860
1.201	-4.150	-,00460	.04700	.06530	00510	.01050	.06280	.04350	00460	.06280	07320
1.201	-2.070	.00010	.05050	.03030	00200	.00680	.06470	.04290	.00010	.06470	.00270
1.201	.010	.00520	.05060	-,00440	.00020	.00380	.06480	.04270	.00520	.06480	.06130
1.201	2,090	00010.	.04840	03610	.00280	.00010	.06300	.04410	.01090	.06300	.17420
1.201	4,140	.01490	.04650	07220	.00800	00350	.06110	.04500	.01490	.06110	.24370
1.201	6.270	.01670	.04310	11090	,00940	00740	.05960	.04600	,01670	.05960	.26080
1.201	8.360	.01660	.04090	-,14860	.01160	00980	.05900	.04600	.01660	.05900	.28140
1,201	10.380	.01670	.03670	18310	.01170	01150	.05900	.04590	.01670	.05980	.28330
1.201	.010	.00870	.04930	00450	.00000	.00340	.06470	.04300	.00870	.06470	.13530
	GRADIENT	04500.	00014	01656	.00130	00167	00025	,00020	.00240	~.00025	.03683
	•	RUN	NO. 91/ 0	RN/L =	7.04 GRA	DIENT INTER	VAL = -5.0	0/ 5.90			
MACH	BETA	ON	CL.H	CY	CYN	CBL.	CAF	CAB	CL .	Ф	LÆ
1.959	-10.440	.00130	00900	.17330	00300	.00220	.06420	.02690	.00150	.06420	.02430
1.959	-6,410	.01230	00930	.13700	00360	.00290	.06520	.02600	.01250	.06510	.19200
1,959	-6.290	.05550	00770	.10270	00450	.00350	,06640	.02530	.02230	.06640	.33600
1,959	-4.190	.03100	00800	.06750	-,00320	.00280	.06760	.02440	.03110	.06750	.46120
1.959	-2,09 0	.03700	-,00760	.03160	00140	.00190	.06780	.02460	.03710	.06760	.54750
1.959	.000	.04050	-,00820	~.00250	.00070	.00060	.06810	.02450	.04040	.06800	.59350
1.959	2.110	04160	-,00810	03550	.00260	-,00020	.06750	.02520	.04160	.06750	.61730
1.959	4.180	.04100	-,00770	07010	.00480	00110	.06660	.02560	.04110	.06660	.61670
1.959	6.330	.03960	~.00740	-,10470	.00580	00170	.06670	.02560	.03980	.06660	.59830
1,959	6.430	.03490	90840	-,13960	.00550	00180	.06710	.02590	.03500	.06700	.52250

MSSS (FAS) MAR ATP ORB (BICIDIFINI) (MIEI) (VIKIRI)

~~	 	~,	~

PARAMETRIC DATA

									-AKANE IKI	VAIA.	
MET .	7.4190 80.	IN. WAR	P = 3.4	530 IN.				ALPHA =	10,000	CONFIG =	3.000
LREF =	2.1020 IN.	YHR	• -	000 IN.				RUDDER =	.000	RUDFLR =	10.000
BREF #	4.0300 IN.	ZMRI	0, = 9	000 IN.				ELEVTR =	.000	CRDELY =	.000
SCALE =	.0040							IBOELY =	.000	AILRON =	.000
								OBDAIL =	.000	IBDAIL =	.000
		RUN	NO. 45/ 0	RN/L =	4,96 GR	OTENT INTE	RVAL = -5.0	00.6			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	CD.	L/0
.596	-10,100	.52760	03440	.15600	01010	.01590	-,00020	.02710	.51760	.10160	5.08340
.596	-8.150	.52350	03030	.12540	01050	.01630	.00220	.02460	.91320	.10350	4.95860
.596	-6,080	.92820	02690	.00090	00970	.01480	.00240	.02430	.51780	.10460	4.94810
.596	-4,030	.53340	02270	.05710	00730	.01250	.00250	.02420	.52280	.10590	4.93550
.596	-2,010	.54200	01820	.02270	00450	,00940	.00370	.02470	.53100	.10880	4.87710
.596	.010	.54640	01680	00860	00100	.00800	.00510	.02390	.53500	.11110	4.81180
.596	2,070	.55010	01490	04090	.00160	.00190	.00260	.02530	.53910	.10940	4.92560
,596	4.060	.95780	01580	07140	.00480	00190	.00030	.02560	.54710	.10880	5.02760
.596	6.150	.55840	01890	10570	.00770	00640	~.00060	.02570	54790	.10780	5,08000
.596	\$.170	.56710	02110	13840	.01020	00990	00290	.02780	.55690	.10730	5,18670
.596	10.110	.56100	02370	16880	.01070	~.01210	00390	.02890	.55100	10510	5.24090
.596	.010	.54860	01510	00870	00110	.00560	.00430	.02440	.53750	,11080	4.85040
	GRADIENT	.00260	.00084	-,01579	.00149	00179	00027	.00017	.00279	.00031	.01150
		RUN	NO. 44/ 0	RN/L =	6,27 GRA	DIENT INTER	RVAL = -5.0	5,00			
MACH	BETA	CN	CLM .	CY	CYN	CBL.	CAF	CAB	α.	c o	L/D
.901	.020	.56480	01240	01500	,00150	.00820	.02530	.03290	.54800	.13900	3,94130
.901	-10.280	,56990	04680	.17070	-,00670	.01060	.02120	.03370	,55400	.13550	4,08580
.901	~6.290	.58940	04900	.13660	00900	.00970	.02170	.03240	,57280	.14030	4.08190
.901	-6.180	.54340	01860	.08710	00340	,02160	.02360	.03270	,52760	.13250	3,98130
.961	~4,100	.55530	01800	.05250	00300	.01860	.02320	.03240	.55730	.13430	4.00050
.901	-2.050	.56520	01430	.01730	-,00030	.01400	.02440	.03240	.54860	.13800	3.97270
.901	.020	.56570	01320	01280	.00140	.00860	.02480	.05200	.54900	.13860	
.901	2.100	.57120	01430	~.04420	.00330	.00260	.02450	.03290	.55440	.13950	3.96010
.901	4.140	.57680	-,01450	07590	.00540	00340	.02250	.03340	.56030	.13880	3.97210 4.03430
.901	6.250	.57270	01630	-,10730	.00700	00920	,01990	.03470	.55680	.13530	
.901	8.300	.57220	01610	14160	.00780	01410	.01840	.03620	.55670	.13370	4.11350
.901	10.280	.56800	01570	17180	.00660	-,01980	.01830	.03720	,55260	.15370	4.16370
	GRADIENT	.00257	.00034	01523	eeooo.	00269	~.00006	.00012	.00251	.00051	4.16130 .00324
										. 00001	. 44364

GRADIENT

.00147

.00023

-,01399

.00008

-.00111

-,00006

.00014

.00144

MISS (FAS) NAR ATP CRB (BICIDIFINI) (WIEI) (VIKIRI)

(R76305)

.00027

					HIV CKD (51)	CEDIT INIT (MI	FIL (AIKIKI)	•	(R763)	05) (03 N	CA 45 }
REFERENCE DATA				•				PARAMETRI	E DATA		
SREP =	7,4190 80,1			4530 IN.				ALPHA =	10,000	CONFIG #	3.000
LREP =	2,1020 TN.	YMR	-	.0000 IN.				RUDDER =	.000	RUDFLR 12	10.000
BREF #	4.0300 IN.	ZHRI	* .	.0000 IN.				ELEVTR =	.000	OBDELY =	.000
SCALE =	.0040							IBOELV =	.000	AILRON #	.000
								CBDAIL =	.000	IBDAIL #	.000
		RUN	NO. 45/	0 RN/L =	6.67 GR	DIENT INTER	VAL = -5.0	10/ S.00			
MACH	BETA	CN	CLM	CA	CYN	CBL	CAF	CAB	CL.	0	L/D
1.197	-10,360	.63910	10040	.14970	.00120	.02570	.05950	.04570	.61310	.19010	3.22460
1.197	-6,340	.65470	10000	.11250	.00000	.02340	.06030	.04380	.62600	.19440	3,22930
1,187	-6.220	.66630	10000	.07760	00020	.02010	.06140	.04220	.64100	,19870	3.22480
1,197	~4.180	.67950	~,10070	.04410	.00030	.01410	.96210	.04180	,65170	.20210	3,22460
1,197	-2.050	.68750	09800	.01250	.00190	.00850	.06290	.04210	.65930	.20470	3.22000
1.197	.030	.69520	-,09700	01670	.00200	.00350	.06370	.04230	.66660	.20740	3,21330
1,597	2,130	.70610	09850	-,04430	.00200	-,00140	.06300	.04260	.67730	.20920	3,23650
1.197	4.180	.71130	-,10030	07320	.00320	- 00670	.06210	,04220	.68250	.20950	3,25780
1,197	6.330	.71330	10200	-,10460	.00360	01310	.06060	.04460	.68490	.20840	3,28550
1,197	6.390	.71140	10110	-,13640	.00320	01790	.06030	.04590	,68310	.20770	3.28840
1,197	10,360	.70220	10160	16998	.00170	05500	.06010	.04590	.67420	20540	3.28220
1.197	.030	.69520	09720	01630	.00190	,00310	.96340	.04310	.66670	.20700	3,21960
	GRADIENT	.00395	.00001	01401	.00028	00248	.00001	.00006	.00383	.00093	.00398
		RUN	NO. 69/	D RN/L =	7.03 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA	CN	GLM.	CY	CYN	CBL.	CAF	CAB	a.	9	L/D
1.961	-10,450	.40110	06940	.14530	.00690	.00860	.05950	.02730	.38120	.13630	2.75640
1.961	-6,430	.41160	06960	.11310	.00520	.00800	.06030	.02580	.39140	.14130	2.76890
1.961	-6,290	.42830	07250	.08190	.00270	.00740	.06090	.02540	.40740	.14550	2.79910
1,961	-4.170	.43900	-,07360	.05180	08000.	.00600	.06180	.02530	.41760	.14880	2.80600
1,961	-2.080	.44410	-,07410	.02210	.00100	.00400	.06350	.02550	42230	.15160	2.78570
1.961	.010	.44640	07340	00800	.00150	.00160	.06350	.02670	.42640	.15250	2.79450
1.961	2,120	.45270	-,07260	03690	.00170	00110	.06290	.02660	.43070	.15290	2.81540
1.961	4.200	,45010	-,07190	~.06520	.00130	00310	.06150	.02620	.42850	.15100	2,83770
1.961	6.340	.45240	~.07260	09440	.00050	00530	.06130	.02640	.43080	.15130	2.84720
1.961	8.440	.44760	07210	12470	00180	00700	.06150	.02640	.42600	.15040	2,83140
1.961	10.470	.44320	07160	~.15660	00430	-,00840	.06140	.02680	.42170	.14930	2.82430
1.961	.010	.44270	07160	00900	.00120	.00140	.06290	,02670	.42100	.15070	2.7934D
	GRADIENT	.00147	.00023	- 01399	COOCO	- 00111					~. 133eU

4,959

10.030

GRADIENT

.18590

.00077

-.02820

.00002

-.09880

-.00912

-,00860

-,00086

-.00570

-,00077

.05620

.00012

.00400

.00003

.17220

.00073

08680.

.00026

1.91550

.00223

MSSS (FAS) HAR ATP ORB (BICIDIFINI) (WIEI) (VIKIRI)

			7033	(FAS) NAR	ATP ORB (B1	CIDIFIHI) (WI	E1) (Y1K1R1))	(R763)	05) (03 N	OV 78)
	REFEREN	CE DATA							PARAMETRI	C DATA	
SREF .	7.4190 80		-,	1530 IN.				ALPHA =	10,000	CONFIG 2	3,000
LREP =	2.1020 IN.	•	· = '.0	0000 IN.				RUDDER =	.000	RUDFLR =	10.000
BREF =	4.0300 IN.	. 214RP	* .0	DOGO IN.				ELEVTR =	.000	OBDELY =	.000
SCALE =	.0040							IBDELY =	.000	AILRON =	,000
					+ +			CBDAIL =	.000	IBOAIL =	,000
		RUN	NO. 23/0	RN/L =	4.11 GR	ADIENT INTER	VAL = -5.0	00/ 5.00			
MACH	ATSB	CN	Q.H	CY	CYN	CBL	CAF	CAB	a.	co	L/0
2.990	-10,140	.26990	04420	.12610	.00860	.00640	,06030	.01390	.25360	.11030	2.29920
2.990	-8,210	.27590	04470	.09820	.00720	.00530	.05990	.01390	.25960	.11110	2.33650
2.990	-6,140	.27690	04290	.07140	.00530	.00470	.05910	.01390	.26270	.11090	2.36630
2.000	-4.080	.26570	04360	.04470	.00360	.00330	.05870	,01370	,26740	.11140	2,40010
2.590	-2.040	,26590	04370	0e0 50 ,	.00190	.00220	.05800	.01370	.26970	.11120	2.42400
2.990	.000	.26810	04320	00430	00000	.00060	.05840	.01370	.27160	.11200	2.42670
2.990	2,060	.29100	04330	02960	.00010	~,00100	.05870	.01380	.27450	,11290	2.43070
2.990	4,090	.29090	-,04400	05370	-,50150	-,00230	.05970	.01380	.27430	.11380	2,40950
004.5	9.200	.28950	04520	-,08040	00360	00350	.05980	.01380	.27290	.11370	2.40010
2.990	6,200	.28790	-,04370	10650	00550	00500	.06040	.01400	.27120	.11390	2.37950
2,990	10.170	.28650	04530	-,13420	-,00740	00630	.06090	.01420	.26980	,11410	2,36370
	GRADIENT	.00095	00002	-,01210	00059	-,00070	.00013	.00001	.00091	.00032	.00125
		RUN N	O, 24/ G	RN/L =	4,85 GRA	DIENT INTERV	/AL = -5.0	0/ 5.00			
MACH	BETA	CN	GTH.	CY	CYN	ĊBL.	CAF	CAB	σ.	œ	L/O
4.959	-10.010	.16990	02720	.09400	.01020	.00570	.05680	.00290	.15640	.08740	1.78910
4.959	-6.090	.17520	02600	.07470	.00820	.00530	.05470	.00330	.16200	.08640	1.87510
4.959	-6.060	.18090	02820	.05490	.00620	.00440	.05310	.00340	.16780	.08580	1.95430
4.959	-4.040	.18420	03060	.03396	.00420	.00340	.05090	.00350	.17150	.08430	2,03410
4.959	-2.020	,16660	03110	.01530	.00260	.00180	.04990	.00360	.17420	.08380	2.07730
4.959	.000	.18950	02990	00380	.00090	.00020	.04930	.00380	.17700	.06370	2.11350
4,959	2.020	,18950	05150	02240	00080	00130	.05010	.00370	.17690	.08450	2.09200
4.959	4,040	.19060	03020	03940	00280	00280	.05200	.00380	.17750	.08660	2.04930
4.959	6,110	.18980	~.03200	-,05970	-,00490	00410	.05340	.00390	.17650	.08780	2.01080
4.959	8.090	.18690	02930	07900	00650	00490	.05470	.00400	.17340	.08650	1.95810
4 000										*	

MSSS (FAS) MAR ATP ORB (BICIDIFINI) (MEI) (VIKIRI)

	REFERENC	E DATA							PARAMETRIC	DATA	
SAEF .	7.4190 89.	• •		930 IN.				ALPHA =	\$0,000	CONFIG #	3,000
LREF W	8,1020 IN,	YMRP	•-	000 IN.				RUDDER =	.000	RUDFLR #	10.000
BREF .	4.0500 IN.	ZHRP	• •	000 IN.				ELEVIR =	.000	OBDELV #	.000
SCALE =	.0040							180EFA =	.000	AILRON E	.000
						•		CBDAIL =	.000	IBDAIL =	.000
		RUN	NO. 62/ 0	RN/L =	4.98 GR	ADIENT INTER	VAL = -5.0	0, 5.00			
MACH	DETA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	60	L/D
.599	-10.080	.69176	03360	.14260	00470	.01060	01680	.04420	.83440	,31480	2,65040
.599	-8.150	.86760	03130	.11210	00530	.00750	01400	.04390	.82950	.31590	2.6256D
.899	-6,090	.69390	02740	06090	00500	.00430	01200	.04540	.83460	.32010	2.60680
.202	-4.050	.88660	02420	.04580	00350	0e000.	01290	.04940	.63000	.31740	2,60680 2,61470
.599	-2,010	.88590	01690	.01070	00020	00310	00900	.04970	.82610	.32000	2.58110
.599	.020	.87860	01210	-,02360	.00320	00430	~.00740	.05080	.81890	.31880	2.56830
.599	2.060	,67460	-,00630	04920	.00610	00420	00660	.05000	.81490	.31810	2.56150
.599	4.080	.67370	01020	08400	.00770	00500	00820	.04850	.81450	.31630	2,57500
.599	6,160	.87860	01310	-,11520	.00940	~.00790	-,01170	04880	82040	.31480	2.60610
.599	6.190	.86570	01440	14870	.00970	00920	01340	.04570	,82750	.31600	2,61890
.599	10,170	.90440	02080	-,18790	.00750	00660	01750	.04390	84630	.31920	2.65100
.599	.010	.87770	01050	02260	.00550	-,00490	00840	,05170	.81850	.31750	2.03100
	GRADIENT	-,00201	.00200	01572	.00141	-,00063	,00058	00007	00208	00020	00488
								*-		200025	40465
		RUN I	NO. 61/0	RN/L =	6.28 GR	ADIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA	ON	CLM	CY	CYN	CBL	CAF	CAB	a.	c	L/D
.904	-10,310	.80920	01930	.14440	.01210	,02420	,01400	.05920	.83460	.36080	2.31310
.904	-6,340	.92210	01600	.11270	.00950	.01910	.01620	.05940	.84540	.36830	2.29510
.904	-6.200	.93700	01430	.07900	.00240	.01260	.01690	.05978	.85870	.37530	2.29810
.904	~4.100	.95000	01490	.05030	00170	.00610	.01590	.06130	.87110	.37950	2.29500
.904	-2.030	.94780	-,00990	.01070	.90086	.00090	.01880	.06310	.86790	.38140	2.27540
.964	.040	.94830	00090	02310	.90180	00048	.02168	.06330	.66730	.38420	2,25740
.904	2.110	.95710	-,00060	05090	.00160	00250	.02270	,06350	.87470	.38920	2.24690
.904	4.170	.96010	00550	08010	.00220	00570	.01860	.06280	.87900	.38660	2.27360
.904	6.300	.94980	00550	~.11170	00020	01230	.B141B	.06230	.87150	.37800	2,30490
.904	8.380	.93380	00390	13870	00940	01840	.01410	.06110	.85680	.37140	2.30670
.904	10,400	.92120	~. 0056 0	16700	01540	02500	.01340	.06080	.84570	.36540	2.31400
.904	.040	.96010	00260	02180	.00110	00028	.02260	.06500	.87740	.39050	2.24690
	GRADIENT	.00143	.00135	01559	.00043	00131	.00045	.00016	.00109	.00106	00345

1,958

1,958

10.540

GRADIENT

.040

.85580

.83790

.00146

-.11940

-.11590

.00035

~.15630

-.02100

-.01161

-.01260

.00300

-.00159

-.01820

.00250

-.00223

.04800

.04940

.00002

.02840

.02770

-.00015

.77050

.75560

.00132

.37570

.36930

.00065

2,05080

2.04120

-.00003

MSSS (PAS) HAR ATP ORB (BECEDIFINE) (MIEE) (VIKIRE)

(R76306) (03 NOV 72)

			M333	(PAS) NAR	ATP CRB (G)	CIDIFIMI) (WI	IE3) (VIKIRI)		(R763)	06) (03 N	OV 78 }
	REFERENC	E DATA				•			PARAMETRI	DATA C	
uner a	7.4190 80.	IH. 154RP	* 3.4	550 IN.				ALPHA =	20.000	CONFIG =	3.000
LREF #	2.1020 IH.	YMRP	• .0	000 IN.				RUDDER =	.000	RUDFLR =	40,000
BREF =	4.0300 TH.	ZMRP	* .0	000 IN.				ELEVTR =	.000	OBDELV =	.000
SCALE =	.0040							180ELV =	.000	ATLRON =	.000
								CBDAIL =	.000	IBOAIL =	.000
		RUN 1	io. 60/ 0	RN/L =	6,68 GR	ADIENT INTER	RVAL = -5.0	00/ 5,00	•		
MACH	BETA	ON .	CLM	CY	CYN	CBL	CAF	CAB	a.	CD .	L/0
1.199	-10.360	1.14460	-,14450	.11240	.01520	.03640	.04980	.05070	1.03240	.49660	2,07870
1,199	-0.360	1,14210	13480	.08660	.01250	.02780	.05120	.05440	1.02940	,49710	2,07060
1,199	-6.220	1,14400	12600	.05240	.01000	.01930	.05150	.05640	1,03090	.49860	2,06750
1,109	-4.120	1,14440	12220	.02040	.00810	.01240	.05230	.05700	1.03090	.4996B	2.06350
1.199	-2,020	1,15440	-,12270	-,00680	.00540	.00550	.05\$20	.05670	1,03950	,50470	2.05960
1,199	.080	1.15910	12070	03560	.00490	.00050	.05440	.05990	1,04330	.50790	2,05380
1,189	2.160	1,15600	-,12220	06310	.00220	00220	.05280	.06030	1,04110	.50510	2,06120
1,199	4.240	1.16140	12070	08800	-,00070	~.00770	.05150	.05980	1.04660	.50620	2.06740
1,199	6.400	1.16010	-,12140	-,11650	00330	01580	.05080	.05750	1.04560	.50510	2.06990
1,199	6,490	1,16280	12330	-,14650	-,00560	02408	.04950	.05720	1.04860	.50510	2.07600
1,199	10,510	1.16210	12640	17570	00870	02990	.04840	.05600	1.04840	,50360	2,08170
1.199	.070	1,14970	12130	03580	.00420	08000.	.05390	.05690	1.03500	.50360	2.05510
	GRADIENT	,00170	.00017	01567	00100	00229	00010	.00034	.00158	.00065	.00045
		RUN N	io. 90/0	RN/L =	7.84 GR	DIENT INTER	RVAL = -5.0	10/ 5.QQ			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	α.	æ	L/D
1,958	-10,460	.61270	11540	.12120	,01770	.02140	.04850	.02840	.73130	.35790	2.04320
1.958	-6.450	.82720	~,12010	.09410	.01460	.01800	.04830	.02900	.74450	.36380	2.04650
1.958	-6.300	.84200	12360	.06400	.01160	.01480	.04816	.02950	.75800	.36970	2.05000
1.958	-4,160	.84510	12550	.03100	.00950	.01110	.04810	DEeSD.	.76080	.37100	2,05060
1,958	-2.060	.84940	-,12090	.00260	.00690	.00760	.04940	.02840	.76410	.37410	2.04250
1,956	.030	.64940	11860	02090	.00350	.00300	.05000	.02770	.76390	.37470	2.03850
1,958	2.160	.65620	11870	~.04400	00020	00280	.04950	.02760	.77030	.37710	2.04230
1.958	4.250	.65710	12070	06770	00370	00720	.04850	.02810	.77160	.37630	2.05040
1.958	6.420	.65650	12220	09870	00680	01160	.04740	.02910	.77150	.37510	2.05630
1.958	8.540	.86000	12210	12930	00940	01500	.04780	.02870	.77440	.57700	2.05360

MSSS (FAS) HAR ATP CRB (BICIDIFINE) (MIEE) (VIKIRE)

(RT6306)	68	NON		•
(8/63/6)	t us	HE V	TZ	- 3

PRET = 7,4190 \$0,11N, 198F = 3,4530 IN, PRET = 1,000 IN, 198F = 0,000 IN, RECLET = 0,000 IN, RECLET = 0,000 IN, RECLET = 0,000 IN, RECLET = 0,000 RECLET = 0,000 RECLET = 0,000 RECLET = 0,000 ALCRON = 0,000 RECL		REFERENC	E DATA							PARAJETRIC	DATA	
ECAIL # 4,0000 IN. 2000 IN. 20									ALPHA =	\$0,000	CONFIG =	3.000
Tensor T	-			-					RUDDER =	.000	RUDFLR =	10,000
RUN NO. 26/ 0 RN/L = 4.11 GRADIENT INTERVAL = -5.00/ 5.00 RUN NO. 26/ 0 RN/L = 4.11 GRADIENT INTERVAL = -5.00/ 5.00 RUN NO. 26/ 0 RN/L = 4.11 GRADIENT INTERVAL = -5.00/ 5.00 MACH BETA CN CLM CY CYN CBL CAF CAB CL CD L/O 2.980 -10.190 .0184007620 .10410 .01530 .01590 .09250 .01470 .99420 .27500 2.01510 2.980 -8.200 .0239007990 .07850 .01530 .01530 .01290 .09000 .01470 .56070 .27630 2.03280 2.980 -4.130 .02570 .03570 .03130 .01290 .00990 .04890 .01470 .56050 .27770 2.04400 2.980 -4.100 .6250008400 .00640 .00690 .00890 .04890 .01460 .57050 .27770 2.04400 2.980 -2.010 .640200830001420 .00170 .00140 .04670 .01410 .57750 .22640 2.09550 2.980 .010 .640200830001420 .00170 .00140 .04670 .01410 .57750 .22640 2.09550 2.980 .010 .64020083000350003500 .00170 .00140 .04670 .01410 .57750 .22640 2.09550 2.980 .2.060 .6413008350035300013000120 .00420 .01400 .50000 .28020 .20400 2.09550 2.980 .2.060 .6413008300080000870000410 .08020 .01400 .58000 .28320 2.04600 2.980 .2.060 .6438008230088000870000140 .08020 .01400 .58000 .28320 2.04600 2.980 .2.060 .6438008230080000077000700 .05150 .01440 .58000 .28320 2.04600 2.980 .2.10 .6441008000108000077000700 .05150 .01440 .58000 .28440 2.03440 2.980 .2.10 .64410080001080000770 .01500 .00150 .01470 .58070 .28440 2.03440 2.980 .2.10 .644000850008800 .00500 .01570 .00500 .01440 .58000 .28440 2.03440 2.980 .2.10 .6440005500 .00500 .00500 .00500 .00500 .00540 .40600 .28440 2.03440 2.980 .2.10 .6440005500 .00			ZMRI	٠.	0000 IN.	•			ELEVTR =	.000	OBDELY #	.000
MACH BETA CN CLM CY CYN CBL CAF CAB CL CD L/O 2.990 -10.190 .8164007820 .010410 .01930 .01990 .05250 .01470 .95420 .27500 2.01510 2.990 -2.000 .8239007930 .07850 .01330 .01230 .05930 .01470 .36450 .27630 2.05280 2.990 -4.130 .8267008280 .03310 .01110 .00970 .05000 .01470 .36650 .27720 2.04340 2.990 -2.010 .82800 .03310 .01110 .00970 .05000 .01470 .36650 .27720 2.04340 2.990 -2.010 .6380008320 .03300 .00840 .00840 .00890 .04890 .01480 .37050 .27770 2.04400 2.990 -2.010 .638000830001420 .00840 .00840 .04870 .01450 .37750 .28040 2.09850 2.990 .010 .640200830001420 .00170 .00140 .04870 .01410 .57750 .28040 2.09850 2.990 .010 .64020 .00830003390 .00150 .00140 .04870 .01410 .57750 .28040 2.09850 2.990 .010 .64020 .00830003930 .00150 .00140 .04870 .01410 .57750 .28040 2.09850 2.990 .010 .64020 .00830003930 .00150 .00140 .04870 .01410 .57750 .28040 2.09850 2.990 .010 .64020 .008300 .00840 .00170 .00140 .04870 .01450 .57750 .28040 2.09850 2.990 .010 .64020 .008300 .00840 .00170 .00120 .00120 .01450 .57840 .28130 2.08650 2.990 .2006 .43150 .044410 .0800005790 .00160 .00160 .00100 .00100 .01450 .58000 .28320 2.04960 2.990 .200 .6438008280082000800000770 .00700 .00500 .01440 .58000 .28340 2.04660 2.990 .200 .64470 .0000010480 .00100 .00150 .01470 .58000 .28340 2.04660 2.990 .200 .64470 .0000010460 .01000 .00150 .01470 .58000 .28340 2.04660 2.990 .200 .64470 .0000010460 .01000 .00150 .01470 .57000 .28440 2.02510 2.990 .200 .64470 .000000	BCALE .	.0040							IBDETA =	.000	AILRON =	.000
MACH BETA CH CLM CY CYN CBL CAF CAB CL CD L/O 2.980 -10.150 .8184007820 .10410 .01530 .01590 .05250 .01470 .39420 .27500 2.01510 2.980 -6.200 .2299007990 .07830 .01330 .01290 .05090 .01470 .58170 .27650 2.05280 2.980 -4.150 .8287008280 .05310 .01110 .00970 .05000 .01470 .58650 .27720 2.04340 2.980 -4.080 .8386008320 .03500 .00840 .00850 .00840 .00850 .01450 .57350 .27770 2.04500 2.980 -2.010 .440200830001420 .00170 .00140 .04890 .01450 .57350 .27770 2.05300 2.980 .010 .4402008300031420 .00170 .00140 .04870 .01410 .57750 .20400 2.09930 2.980 2.060 .641300833003530 .00340 .00170 .00140 .04870 .01410 .57750 .20400 2.09930 2.980 2.060 .641300833003530 .00040 .000170 .00140 .04870 .01410 .57750 .2040 2.03930 2.980 2.060 .641300833003530 .00040 .000170 .00140 .00020 .01400 .57840 .25150 2.05450 2.980 4.130 .644100830003790 .00140 .00020 .01400 .50020 .01400 .58000 .28320 2.04980 2.980 6.200 .64380082300823000013000170 .00140 .00020 .01440 .58000 .28320 2.04980 2.980 6.210 .6447008090104600104001030 .05130 .01470 .58070 .28470 2.09440 2.980 10.160 .6402007990129300120001370 .05500 .01470 .58070 .28470 2.09400 2.890 10.160 .6402007990129300128001370 .05500 .01470 .57600 .28440 2.02510 2.890 10.160 .6402007990129300128001370 .05500 .0004400067 .00022 .0006500043 MACH BETA CN CLM CY CYN CRL CAF CAB CL CD L/O 4.899 -10.020 .4844005550 .07020 .01470 .01180 .05500 .00340 .43270 .22400 1.93150 4.990 -0.000 .4990005520 .05380 .01280 .01000 .00500 .00360 .44060 .22400 1.93150 4.990 -0.000 .4990005520 .05380 .01000 .00010 .00030 .00360 .44060 .22400 1.93150 4.999 -0.000 .5038005730 .01180 .00000 .00000 .00000 .44700 .00390 .44720 .22470 1.99030 4.999 -0.000 .5038005730 .01180 .00000 .00000 .00000 .44000 .22400 1.99130 4.999 -0.000 .5038005730 .01180 .00000 .00000 .00000 .44000 .22400 1.99130 4.999 -0.000 .50380 .05770 .00460 .00000 .00000 .00000 .44000 .00000 .44000 .22500 .		•						•	CBDAIL =	.000	IBDAIL =	.000
8.900 -10.150			RUN	NO, 26/	C RN/L =	4.11 GR	WIENT INTER	VAL = -5.0	0/ 5.00			
2.980 -4.200 .6239007990 .07650 .01330 .01290 .05900 .01470 .56170 .27630 2.03280 2.980 -4.150 .6267006260 .05310 .01110 .00970 .05000 .01470 .56500 .27720 2.04340 2.980 -4.150 .6267006260 .05310 .01110 .00970 .05000 .01470 .56650 .27720 2.04340 2.980 -4.080 .6356008200 .00300 .00400 .00690 .04890 .01460 .37360 .27880 2.03450 2.980 -2.010 .64000 .00840 .00840 .00640 .00640 .00410 .04890 .01450 .37360 .27880 2.03850 2.980 .010 .640200830001420 .00170 .00140 .04670 .01410 .57750 .26040 2.05550 2.980 .010 .64020083000350000150 .00140 .04670 .01410 .57750 .26040 2.05550 2.980 .010 .640200830003590001500 .00140 .04670 .01410 .57750 .26040 2.05550 2.980 .010 .64020083000579000460 .00140 .09020 .01400 .58060 .28320 2.04680 2.980 .6100 .64150062300879000460 .00140 .09020 .01400 .58060 .28320 2.04660 2.980 .6200 .64360062300800000770 .00070 .05050 .01440 .58000 .28340 2.03640 2.980 .6200 .64470068001080001070 .001030 .01410 .58000 .28340 2.03640 2.980 .0160 .64020079801283001280 .01370 .05300 .01470 .58600 .28440 2.02310 2.980 .0160 .64020079801283001280 .01370 .05300 .01470 .58600 .28440 2.02310 2.880 .0160 .6402007880128300015800153 .0001400007 .00122 .0006500043 2.880 .0160 .6402007880 .01607 .0015800153 .0001400007 .00122 .0006500043 2.880 .0006500043 .00060 .00060 .44060 .22480 1.95800 2.880 .0006500043 .00060 .00060 .44060 .22480 1.95800 2.880 .0006500043 .00060 .00060 .44060 .22480 1.95800 2.880 .0006500060 .00060 .00060 .44060 .22480 1.95800 2.880 .0006500060 .00060 .00060 .44060 .22480 1.95800 2.880 .0006500060 .00060 .00060 .44060 .22480 1.95800 2.880 .0006500060 .00060 .00060 .44060 .22480 1.95800 2.880 .0006500060 .00060 .00060 .00060 .44060 .22480 1.95800 2.880 .0006500060 .00060 .00060 .00060 .44060 .22480 1.95800 2.880 .0006500060 .00060 .00060 .00060 .44060 .22480 1.95800 2.880 .0006500060 .00060 .00060	MACH	BETA	CN	Q.M	CY	CYN	CBL	CAF	CAB	α	œ	L/O
2.980	2.090	-10.150	.61640	07620	.10410	.01530	.01590	.05250	.01470	.55420		
2.990	2,990	-0.200	.62390	07990	.07650	.01330	.01290	.05090	.01470	.56170	.27630	
2.990	2,990	-6,150	.62670	06260	.05310	.01110	.00970	.05000	.01470	.56650	.27720	2.04340
2.990	-	•	•	•	.03050		.00690	.04890	,01460	.57650	.27770	2.05400
2.980 2.060 .6413008330033500013000120 .04920 .01430 .57840 .20130 2.05830 2.04960 2.980 4.130 .6441008300057900046000410 .05020 .01400 .58060 .28320 2.04960 2.980 6.200 .6436008230080000077000700 .05030 .01440 .58000 .28340 2.04660 2.980 6.210 .64470080901046001030 .05130 .01470 .58070 .28440 2.03940 2.980 10.160 .6402007890129300128001370 .05300 .01470 .57600 .28440 2.02510 2.03940 2.980 10.160 .6402007890129300128001370 .05300 .01470 .57600 .28440 2.02510 2.0006500043 RUN NO. 257 0 RN/L = 4.83 GRADIENT INTERVAL = -5.00/ 5.00 MACH BETA CN CY CYN CBL CAF CAB CL CD L/D 4.959 -10.020 .4844005550 .07020 .01470 .01180 .05300 .00340 .43270 .22400 1.93130 4.959 -8.100 .4920005320 .05380 .01290 .01000 .05080 .00360 .44060 .22460 1.95980 4.959 -4.030 .4920005320 .03570 .01000 .00810 .04830 .00380 .44720 .22470 1.99030 4.959 -4.030 .5028005980 .01880 .00740 .00380 .04700 .00390 .45190 .22510 2.00710 4.959 -2.010 .5028005990 .01880 .00740 .00380 .04540 .00390 .45190 .22510 2.00710 4.959 -0.00 .503900573001110 .00200 .00360 .4660 .00380 .45270 .22580 2.02770 4.959 -0.00 .503900573001110 .00200 .00360 .04640 .00290 .45840 .22710 .20110 4.959 -0.00 .503900573001110 .00200 .00390 .04540 .00390 .45840 .22710 .20110 4.959 -0.00 .503900573001110 .00200 .00390 .04540 .00290 .46280 .22890 2.02150 4.959 -0.00 .503900573001110 .00200 .00390 .04540 .00290 .46280 .22890 2.02150 4.959 -0.00 .5120005770026400012000110 .04650 .00290 .46280 .22890 2.02150 4.959 -0.10 .5100005770056400012000100 .04650 .00390 .45540 .22940 1.99980 4.959 -0.110 .51060 .5120005770041600042000590 .04700 .00330 .46560 .22860 .22860 .201440 4.959 -0.110 .51060 .51200057700416000650 .00650 .00650 .00650 .46540 .22940 1.99980 4.959 -0.110 .51060 .505700564000650 .00650 .00650 .00650 .46560 .22860 .22860 .201440 4.959 -0.110 .51060 .5057005620		-2.010	.63600	-,08400	.00640	.00510	.00410	.04690	.01450	.57360	.27890	2.05630
2.990 4.130 .6441008300057900046000410 .05020 .01400 .58060 .28320 2.04660 2.0460000700 .05050 .01400 .58060 .28340 2.04660 2.04600 .00700 .05050 .01440 .58000 .28340 2.04660 2.04600 .00700 .05050 .01440 .58070 .28470 2.04600 2.04600 .00700 .005050 .01470 .58070 .28470 2.03940 2.04600 2.0470 .01600 .01600 .005050 .01470 .58070 .28470 2.03940 2.04600 2.0470 .01600 .005050 .01470 .58070 .28470 2.03940 2.04600 2.0470 .05500 .01470 .58070 .28470 2.03940 2.04800 2.04800 2.04800 2.04800 2.05500 .01470 .58070 .28440 2.02510 2.04800 2.04		-			01420	.00170	.00140	.04870	.01410	.57750	.28040	2.05950
E.990	•		• • •		03550	00130	00120	.04920	.01430	.57840	.26130	2.05630
## 10.000		4,130	.64410	08500	-,05790	00460	00410	.05020	.01400	,58060	.26320	2.04960
2,990 10,160 .8402007890129300128001370 .05300 .01470 .57600 .28440 2.02510 .00187 .0018800018000180018800188 .0001400007 .00122 .0006500048 .00048 .0006500048 .0006500048 .0006500048 .0006500048 .0006500048 .0006500048 .0006500048 .0006500048 .0006500048 .0006500048 .0006500048 .0006500048 .0006500048 .0006500048 .00065			.64360		08000	-,00770	00700	.05050	.01440	,58000	.28340	2,04660
GRADIENT .001380014010670015800133 .0001400007 .00122 .0006500043 RUN NO. 25/ 0 RN/L = 4.83 GRADIENT INTERVAL = -5.00/ 5.00 MACH BETA CN CLM CY CYN CBL CAF CAB CL CD L/O 4.959 -10.020 .4844005550 .07020 .01470 .01180 .05500 .00340 .45270 .22400 1.95130 4.959 -8.100 .4920005580 .05380 .01290 .01000 .05300 .00340 .44060 .22480 1.95980 4.959 -4.060 .4981005720 .03570 .01000 .00810 .04830 .00360 .44720 .22470 1.99030 4.959 -4.050 .5028005980 .01880 .00740 .00580 .04700 .00390 .45190 .22510 2.00710 4.959 -2.010 .5022006000 .00350 .00470 .00360 .04540 .00390 .45760 .22560 2.02770 4.959 -2.010 .503200573001110 .00200 .00130 .04640 .00260 .45840 .22710 2.01850 4.959 4.050 .513005770026400012000110 .04650 .00290 .46280 .22890 2.02150 4.959 4.050 .5120005770041600042000390 .04440 .00350 .45860 .22860 2.01440 4.959 6.110 .5106005870059700044000650 .04840 .00350 .45860 .22860 2.01440 4.959 6.110 .5106005870059700044000650 .004840 .00350 .45860 .22860 2.01440 4.959 6.110 .5106005870059700044000650 .00500 .00380 .45540 .22900 1.99980 4.959 8.110 .5097005620074400099000650 .05020 .00380 .45540 .23000 1.97950 4.959 10.040 .5059005640094100021000100 .05220 .00390 .45300 .23120 1.95910		8.210	.64470	08090	10460	-,01040	01030	.05150	.01470	.58070	,28470	2.03940
RUN NO. 25/ 0 RN/L = 4.65 GRADIENT INTERVAL = -5.00/ 5.00 MACH BETA CN CLM CY CYN CBL CAF CAB CL CD L/O 4.959 -10.020 .4844005550 .07020 .01470 .01180 .05300 .00340 .43270 .22400 1.95130 4.959 -8.100 .4920005520 .05380 .01290 .01000 .05080 .00360 .44060 .22480 1.95980 4.959 -8.060 .4961005720 .03570 .01000 .00610 .04830 .00380 .44720 .22470 1.99030 4.959 -4.050 .5026005980 .01880 .00740 .00580 .04700 .00390 .45190 .22510 2.00710 4.959 -2.010 .5082006000 .00350 .00470 .00360 .04540 .00390 .45760 .22580 2.02770 4.959 .000 .509300573001110 .00200 .00130 .04640 .00260 .45840 .22710 2.01850 4.959 4.050 .5143005770026400012000110 .04650 .00290 .48280 .22390 2.02150 4.959 4.050 .5120005770041600042000390 .04700 .00350 .46060 .22860 2.01440 4.959 6.110 .510600557005970004400042000550 .04840 .00350 .45880 .22940 1.99980 4.959 8.110 .5077005620074400042000650 .04840 .00350 .45880 .22940 1.99980 4.959 8.110 .5077005620074400099000650 .05020 .00380 .45300 .23120 1.95910	2,990	10,160	.64020	07890	-,12930	01280	01370	.05500	-01470	.57600	.28440	2.02510
MACH BETA CN CLM CY CYN CBL CAF CAB CL CD L/O 4.959 -10.020 .4844005550 .07020 .01470 .01180 .05300 .00340 .43270 .22400 1.93130 4.939 -8.100 .4920005520 .05380 .01290 .01000 .05080 .00360 .44060 .22480 1.95980 4.959 -8.060 .4981005720 .03570 .01000 .00810 .44830 .00360 .44720 .22470 1.99030 4.959 -4.030 .5026005980 .01880 .00740 .00580 .04700 .00390 .45190 .22510 2.00710 4.959 -2.010 .5082006000 .00350 .00470 .00360 .04540 .00390 .45760 .22560 2.02770 4.959 .000 .50950057000110 .00200 .00130 .04640 .00260 .45840 .22710 2.01650 4.949 2.040 .5143005770026400012000110 .04650 .00290 .46280 .22890 2.02150 4.959 4.050 .5120005770041600042000390 .04700 .00350 .45060 .22860 2.01440 4.959 6.110 .5106005870059700042000650 .04840 .00350 .45880 .22940 1.99980 4.959 8.110 .5077005620074400099000850 .0320 .00380 .45540 .23000 1.97930 4.959 10.040 .5099005640094100021000850 .05220 .00390 .45300 .23120 1.95910		GRADIENT	,00138	-,00014	-,01067	00158	00133	.00014	00007	.00122	.00065	00043
4.959 -10,020 .48440 -,05550 ,07020 ,01470 ,01180 ,05300 .00340 .45270 .22400 1.95130 4.959 -8,100 .49200 -,05520 .05380 ,01290 .01000 ,05080 .00360 .44060 .22480 1.95980 4.959 -6,060 .49810 -,05720 .03570 .01000 .00810 .04830 .00380 .44720 .22470 1.99030 4.959 -4,050 .50280 -,05980 .01880 .00740 .00580 .04700 .00390 .45190 .22510 2.00710 4.959 -2,010 .50280 -,05980 .00880 .00470 .00380 .04540 .00390 .45760 .22560 2.02770 4.959 -2,010 .50280 -,05900 .00110 .00200 .00130 .04640 .00260 .45840 .22710 2.01850 4.959 2,040 .51430 -,05770 -,02640 -,00120 -,00110 .04650 .00260 .48280 .22390 2.02150 4.959 4.050 .51200 -,05770 -,04160 -,00420 -,00390 .04700 .00350 .46060 .22860 2.01440 4.959 6.110 .51060 -,05870 -,05970 -,00440 -,00650 .04840 .00350 .45860 .22940 1.99980 4.959 8.110 .50770 -,05620 -,07440 -,00990 -,00850 .05220 .00380 .45540 .23000 1.97930 4.959 10,040 .50590 -,05640 -,09410 -,00100 .00550 .00350 .00380 .45540 .23000 1.97930 4.959 10,040 .50590 -,05640 -,09410 -,00990 -,00850 .05220 .00390 .45300 .23120 1.95910			RUN	NO. 25/	D RN/L =	4.83 GRA	DIENT INTER	VAL = -5.0	0/ 5,00			
4.959 -8.100 .4920005520 .05380 .01290 .01000 .05580 .00380 .44060 .22480 1.95980 .4.959 -6.060 .4981005720 .03570 .01000 .00810 .04830 .00380 .44720 .22470 1.99030 .4.959 -4.030 .5028005980 .01880 .00740 .00580 .04700 .00390 .45190 .22510 2.00710 .4.959 -2.010 .5082006000 .00350 .00470 .00360 .04540 .00390 .45760 .22560 2.02770 .4.959 .000 .509500573001110 .00200 .00130 .04640 .00260 .45840 .22710 2.01850 .4.959 2.040 .5143005770026400012000110 .04650 .00290 .46280 .22990 2.02130 .4.959 4.050 .5120005770024400042000390 .04700 .00330 .46060 .22660 2.01440 .4.959 4.050 .5120005770041600042000390 .04840 .00350 .45860 .22940 1.99980 .4.959 8.110 .5106005870059700074000650 .0520 .00380 .45540 .22940 1.99980 .4.959 8.110 .5077005620074400099000650 .05220 .00380 .45540 .23000 1.97930 .4.959 10.040 .5059005640094100121001090 .05220 .00390 .45300 .23120 1.95910	MACH	BETA	CN:	CLM	CY	CYN	CBL	CAF	CAB	a.	CO.	L/0
4.959 -8.060 .4961005720 .03570 .01000 .00810 .04830 .00380 .44720 .22470 1.99030 .4.959 -4.050 .5026005980 .01880 .00740 .00580 .04700 .00390 .45190 .22510 2.00710 .4.959 -2.010 .5082006000 .00350 .00470 .00360 .04540 .00390 .45760 .22580 2.02770 .4.959 .000 .50950057300110 .00200 .00150 .04640 .00260 .45840 .22710 2.01850 .4.959 .000 .50950 .05770026400012000110 .04650 .00290 .48280 .22390 2.02150 .4.959 .4.050 .5120005770041600042000120 .00470 .00350 .46060 .22860 2.01440 .4.959 .4.050 .5120005770041600042000590 .04840 .00350 .46060 .22860 2.01440 .4.959 .6.110 .5106005870058700074000650 .04840 .00350 .45880 .22940 1.99980 .4.959 .6.110 .5077005820074400099000650 .05020 .00380 .45540 .23000 1.97950 .4.959 .6.110 .5097005640094100099000650 .05220 .00390 .45300 .23120 1.95910	4.959	~10.020	.48440	05550	,07020	.01470	.01180	.05300	.00340	.43270	.22400	1.93130
4,959 -4,050 .50260 05980 .01880 .00740 .00580 .04700 .00390 .45190 .22510 2.00710 4,959 -2,010 .50820 06000 .00350 .00470 .00360 .04540 .00390 .45760 .22560 2.02770 4,959 .000 .50950 05730 01110 .00200 .00130 .04640 .00260 .45840 .22710 2.01650 4,959 2.040 .51430 05770 02640 00120 00110 .04650 .00290 .46260 .22890 2.02150 4.959 4.050 .51200 05770 04160 00420 00390 .04700 .00330 .46060 .22860 2.01440 4.959 6.110 .51060 05870 05970 00740 00650 .04840 .00350 .45860 .22940 1.99980 4.959 8.110 .50770 05620 07440 00990 00650 .05820 .00380 .45540 .23000 1.97950 4.959 <td< td=""><td>4,959</td><td>-8,100</td><td>.49200</td><td>05520</td><td>.05380</td><td>.01290</td><td>.01000</td><td>.05080</td><td>.00360</td><td>.44060</td><td>.22480</td><td>1.95980</td></td<>	4,959	-8,100	.49200	05520	.05380	.01290	.01000	.05080	.00360	.44060	.22480	1.95980
4.959 -2.010 .5082006000 .00550 .00470 .00560 .04540 .00390 .45760 .22560 2.02770 4.959 .000 .509500573001110 .00200 .00130 .04640 .00260 .45840 .22710 2.01850 4.959 2.040 .5143005770026400012000110 .04650 .00290 .46280 .22890 2.02150 4.959 4.050 .5120005770041600042000390 .04700 .00350 .46060 .22860 2.01440 4.959 6.110 .5106005870059700074000650 .04840 .00350 .45680 .22940 1.99980 4.959 8.110 .5077005620074400099000650 .0520 .00380 .45540 .23000 1.97950 4.959 10.040 .5059005640094100121001090 .05220 .00390 .45300 .23120 1.95910		-6.060	.49810	05720	.03570	.01000	.00810	.04830	.00380	.44720	.22470	1.99030
4.959 .000 .509500573001110 .00200 .00130 .04640 .00260 .45840 .22710 2.01850 4.949 2.04 .9143005770028400012000110 .04650 .00290 .46280 .22890 2.02150 4.959 4.050 .5120005770041600042000390 .04700 .00350 .46060 .22860 2.01440 4.959 6.110 .5106005870059700074000650 .04840 .00350 .45860 .22940 1.99980 4.959 8.110 .5077005620074400099000650 .0520 .00380 .45540 .23000 1.97950 4.959 10.040 .5059005640094100121001090 .05220 .00390 .45300 .23120 1.95910	4,959	-4.030	.50260	-,05980	.01880	.00740	.00580	.04700	.00390	.45190	.22510	2.00710
4,959 2,040 .5145005770026400012000110 .04650 .00290 .46260 .22890 2.02150 4.959 4.050 .5120005770041600042000390 .04700 .00350 .46060 .22860 2.01440 4.959 6.110 .5106005870059700074000650 .04840 .00350 .45860 .22940 1.99980 4.959 8.110 .5077005620074400099000850 .05020 .00380 .45540 .23000 1.97950 4.959 10.040 .5059005640094100121001090 .05220 .00390 .45300 .23120 1.95910	4.959	-2,010	.50820	06000	.00350	.00470	.00360	.04540	.00390	.45760	.22560	2.02770
4.959 4.050 .5120005770041600042000590 .04700 .00530 .46560 .22660 2.01440 4.959 6.110 .5106005870059700074000650 .04840 .00350 .45860 .22940 1.99980 4.959 6.110 .5077005620074400099000650 .05020 .00380 .45540 .23000 1.97950 4.959 10.440 .5099005640094100121001090 .05220 .00390 .45500 .23120 1.95910	4.959	.000	.50950	05730	01110	.90200	.00130	.04640	.00260	.45840	.22710	2.01850
4.959 6.110 .3106005870059700074000650 .04840 .00350 .45860 .22940 1.99980 4.959 8.110 .5077005620074400099000650 .05020 .00380 .45540 .23000 1.97950 4.959 10.040 .5099005640094100121001090 .05220 .00390 .45300 .23120 1.95910		2.640	.51430	-,05770	02640	~.00120	00110	.04650	De S 00,	.46280	.22890	2.02150
4,959 8,110 .5077005620074400099000850 .05020 .00380 .45540 .2300 1.97950 4.959 10,040 .505900564009410 +.0121001090 .05220 .00390 .45300 .23120 1.95910		4.050	.51200	-	-,04160	00420	~.00398	.04700	.00330	.46060	.22860	2,01440
4.959 10,040 .50590 -,0564009410 +.0121001090 .05220 .05300 .45300 .23120 1.95910		6.110	.51060	05870	05970	00740	00650	.04840	.00350	.45880	.22940	1.99980
DIECE, 1 02163, 00064, 40001			.50770	-,05620	07440	~.00990	00850	.05020	.00380	.45540	.23000	1.97950
\$2000. 12000. 21100. 11000 20000. 21100 20000. 25000. 25000. 25000.	4.959	10,040	.50590		09410	+.01210	01090	.05220	.00390	.45300	.23120	1.95910
		GRADIENT	.00123	.00032	00746	00144	00119	.00005	-,00011	.00112	.00051	.00042

2,990

10,190

GRADIENT

1.05060

.00138

-.12390

-.00019

-.12950

-,01023

-.01320

-.00151

-.02030

-.00241

.04570

-.00002

.01470

.00001

.86420

.00116

.59910

.00075

1.44240

MSSS (FAS) NAR ATP ORB (BICIDIFINI) (WIEI) (VIKIRI)

(R76307) (63 NOV 72)

									(K16201) (G2 NOV 72)		
	REFERE	HE DATA							PARAJETRI	DATA	
SREF =	7.4190 B	Q.IN. WARF	- 3,4	930 IN.				ALPHA =	30,000	CONFIG =	3,000
LREP =	2.1020 (N, YHRF	.0	000 IN.				RUDDER =	.000	RUDFLR =	10,000
BREF =	4.0500 (N, ZHRF	.0	000 IN.				ELEVTR =	.000	OBDELV =	.000
SCALE =	.0040							IBOELV =	.000	ATURON =	.000
								OBDAIL =	.000	18DAIL =	.000
		RUH	NO. 192/ 0	RN/L =	4.96 GRA	DIENT INTER	IVAL = -5.0	00, 5.00		·	
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	Ф	L/b
.594	-10,120	1.13660	04750	.06490	.02380	.01910	02720	.06960	.97810	.58350	1,67620
.594	-6,170	1,16620	-,04860	08690.	.01650	,02000	02810	.07000	1,00330	.59900	1.67470
.594	-4.150	1,17820	-,04370	.05530	.01660	.01170	02370	,06915	1.00930	.60840	1,65870
.594	-4.100	1,17490	-,04000	.04070	.01390	.00210	02060	.06970	1,00470	.60930	1.64880
.594	-2.060	1,16390	03390	.01880	.01010	.00070	02220	.07240	1.01310	.61290	1.65270
.594	.000	1,17860	03030	~,00750	.00420	.00280	02050	.07210	1.00760	.61160	1.64740
.594	2.040	1,17510	03060	02540	~.00230	.00000	02310	.07460	1,00610	.60750	1,65610
.594	4.050	1,16150	03750	04660	-,00360	00410	-,02230	.07220	1.01120	.61160	1.65330
.594	4,140	1,18100	04450	-,06140	00750	01050	02750	,07410	1.01360	.60670	1.67060
.594	6.130	1,17050	04700	-,06750	01140	01810	~.03370	.00000	1.00820	.59540	1.69310
.594	10.110	1.15290	04280	07290	-,02070	-,02160	02900	.07590	.97420	,57890	1.68270
.594	.000	1.17970	03050	~.00570	.00470	.00090	~.01990	.07250	1.00830	.61270	1,64570
	GRADIENT	,00021	.00040	01073	00232	-,00064	00021	,00035	.00029	00004	.00061
		RUN	NO. 27/ 0	RN/L *	4,11 GRA	DIENT INTER	VAL = -5.0	0/ 5,00			
MACH	BETA	CN CN	CLM	CY	CYN	CBL	CAF	CAB	a.	æ	L/D
2.990	-10.130	1.02420	12130	.08410	.01600	.02370	.04720	.01450	.84150	.58580	1.43630
2.490	-6,160	1.03180	12380	.06150	.01520	.02010	.04600	.01410	.84840	.58890	1,44050
2.990	-6.110	1,03810	-,12690	.03790	.01250	.01610	.84470	.01440	.85440	.59130	1,44500
2,990	~4.060	1.04430	13010	.01630	.00950	.01180	.04370	.01440	.86010	.59370	1,44860
2.990	-2.010	1.04630	13120	00390	.00570	.00750	.04310	.01450	.86398	.59550	1,45060
2.990	.020	1.05110	-,13110	02328	.00230	.00280	.04280	.01440	.86630	.59680	1.45160
8.990	2.070	1.05340	-,13220	-,04708	.00030	00290	,04310	,01450	.86810	.59830	1,45090
2.990	4.140	1,05590	13150	06690	-,00330	00770	.64350	.01450	.86990	.60000	1.44980
2.990	6.210	1,05640	12990	-,08590	~.00700	01200	.04400	.01450	.87010	.60080	1.44810
2.990	8,220	1.05230	12660	10740	01020	01610	.04490	.01470	.86610	.59930	1.44520
2.990	10.190	1.05060	12390	- 12950	- 01320	- 69630	04870	04.4=0			

4.959

10,040

GRADIENT

.90440

.00171

~,09910

-.09640

+,00016

-.08140

-.09710

-.00692

MSSS (FAS) HAR ATP ORB (BECEDIFINE) (WIEE) (VIKERE)

(R7630T)

.51920

.51750

es000.

1,44200

1,43640

.00034

	REFERENCE	E DATA							PARAMETRIC	COATA	
SARY = LARY = BARY = SCALE =	7.4190 SQ. 2.1020 IN, 4.0300 IN. .9040	EM, YORR YMRR ZMRR	· =	6530 IN. 0000 IN. 0000 IN.		,		ALPHA = RUDOER = ELEVIR = IBDELV = CBOAIL =	000, 000, 000, 000,	CONFIG = RUDFLR = CBDELV = AILRON = IBDAIL =	\$,000 000,01 000 000,
	•	RUN	NO. 26/ 1	RN/L =	4.85 GR	LO LENT INTER	VAL = -5.0	00, 5.00			
MACH	BETA	CN	-CLH	CY	CYN	CBL.	CAF	CAB	GL.	œ	
4.959	-10.010	.87830	09560	.05280	.01540	.01990	.05310	.00230	.72020	.50550	L/0
4.959	-0,000	.06620	09750	.03650	.01340	.01700	.05120	.00280			1,42470
4,959	-6,040	.69670	10060	.01900	.01070	.01350	.04920	.00310	.72780	,50610	1.43250
4.959	-4.020	.69790	09900	.00500	.00840	.00990	.04850		.73780	.51190	1.44120
4.959	-2,000	.90710	10150	01010	.00500	.00610		.00320	.73920	.51200	1.44360
4.959	.010	.90630	-,10020	02300	.00260		.04790	.00340	.74730	.51630	1.44720
4.959	2.030	.91290	10090	03640		.00190	.04800	,00340	.74830	.51710	1.44680
4.959	4.050	.91220	-,10080		-,00010	00220	.04810	.00360	.75210	.51970	1,44700
4.959	6.120	.91150		05160	-,00530	00590	.04610	.00360	.75150	.51930	1,44710
4.959			09940	~.06450	00670	00960	.04840	.00360	.75070	.51920	1,44600
~. 838	4,120	.90990	~.09910	~.08140	00930	- Ottan	04000	800.0			

-.01360

-,01700

-.00198

.04950

.05090

-.00003

.00360

.00370

.00005

.74880

.74340

.00146

-.00930

-.01140

-,00141

HS35 (FAS) HAR ATP CRB (BECIDIFINE) (WEEL) (VEKERE)

	REFERE	KE DATA							PARAMETRIC	DATA	
srer •	7.4190 80	2.1N. 304R	P = 3.	.4530 IN.				44 =			
LREF *	2.1020 1	•		.0000 IN.				ALPHA =	\$0,000	COALIE =	3,000
BREF =	4.0500 11			.0000 IN.				RUDDER =	,000	RUDFLR =	10,000
BCALE =	.0040	4. ZP6()		,0000 IN.				ELEVTR =	.600	OBDELY =	.000
PCALE -	.0040							180ELV =	.000	AILRON =	.000
				-				CBDAIL =	.000	IBDAIL =	.000
		RUN	NO. 193/	0 RN/L =	4.18 GR	ADIENT INTER	VAL = -5.0	00/ \$.00			
HACH	BETA	CN CN	CL.H	CY	CYN	CBL	CAF	CAB	CL.	Ф	L/D
8,990	.000	1,79620	19510	.01280	00260	.00070	.03140	.01340	1,07670	1,44050	.74740
2.990	-10,080	1.76570	18820	.07770	.01598	.02530	.03450	.01360	1,05490	1,41630	.74480
2,990	-6,150	1,77750	-,19250	.06260	.01270	02070	.03280	.01370	1,06330	1,42480	.74630
2.990	-6,120	1,78710	-,19460	.04820	.00950	.01560	.03220	.01410	1,06950	1.43210	.74670
2.990	-4.070	1.79480	19500	.03570	.00600	,01070	.03160	.01390	1.07450	1.43790	,74730
2.990	-2,030	1.79910	19660	.02300	.00160	.00590	.03110	.01360	1,07760	1,44110	.74770
2,990	.000	1,80010	19630	.01210	~.0029D	.00090	.03070	.01360	1.07840	1.44170	.74800
2.990	2,020	1,79720	-,19420	.00150	00650	-,00430	.03100	.01340	1.07640	1,43950	.74770
2.990	4.050	1.79170	19090	01060	01060	-,00940	.03130	.01330	1.07280	1.43530	,74740
2,990	6,110	1,78350	16650	~.02620	01430	01440	.03190	.01310	1.06750	1,42910	.74690
2.990	0,120	1.77570	-,16300	04010	-,01790	01970	.03230	.01290	1.06230	1,42320	.74640
	GRADIENT	-,00040	.00052	~,00563	00204	00249	00003	00007	00023	,00033	,00001
		RUN	NO. 194/	0 RN/L =	4.92 GR/	UDIENT INTER	VAL = -5.0	9.00			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	60	L/0
4.959	-10,000	1.67880	19320	.06830	.01240	.02500	.04610	.00250	1.00660	1.34430	.74880
4.959	-6,080	1.68740	19560	.05660	.01020	.02020	.04520	.00280	1,01260	1.35050	.74980
4.959	-6.070	1.69750	19770	.04320	.00750	.01500	.04300	.00290	1,02040	1,35700	.75190
4.959	-4.030	1.70140	19990	.03210	.00410	.00980	.04190	.00300	1,02380	1.35960	.75300
4.959	-2,020	1.70640	19740	.02320	.00120	.00440	.04180	.00300	1,02690	1.36350	.75310
4.959	,000	1.70680	-,19620	.01150	~.00230	00110	.04080	.00290	1.02910	1.36480	.75400
4.959	2,010	1.70920	20040	00010	00546	~.00660	.04170	.00280	1,02870	1.36560	.75320
4.959	4,000	1.70660	-,19810	01010	00870	01180	.04190	.00290	1,02690	1,36370	.75300
4.959	6.080	1.69940	19670	-:02460	01150	01690	.04150	00290	1.02280	1,35780	.75320
4.959	8.0 <u>6</u> 0	1.69200	19150	03700	01430	02170	.04130	.00280	1.01840	1,35180	.75330
4.959	10,000	1.68000	19010	05040	01690	02620	.04230	.00300	1.01020	1.34290	
	GRADIENT	.00066	.00003	~,00536			.04230	.00508	1.01050	1.34290	.75220

.905

.905

.905

18.260

20,380

22,400

11,730

GRADIENT

1.01430

1.05360

.70500

.05039

-.13000

-.10620

-,09150

-,13190

-,00668

-.00570

.00260

-.00620

.00260

-.00180

-.00040

-.00180

,00100

.00110

.00044

.00200

-.00410

-.00120

.00470

.00010

.05750

.05590

.05190

.05440

-.00083

.06230

.06890

.07070

,04470

-.00024

.90460

.93130

.95420

.67920

.04922

.35918

.40570

.44970

.19670

.00380

2.51870

2,29520

2.12190

3.45200

.58590

MSSS (FAS) HAR ATP CRB (BICIDIFINI) (WIEL) (VIKIRI)

			14535	S (FAS) HAR	ATP CRB (B16	CIDIFINI) (W	1E1) (VIK1R1)	(RT63)) (03 N	OV 72)
	REFEREN	KE DATA	•	•			•		PARAMETRIC	DATA	
SREF =	7.4190 80	1.1N. 104RP	= 3,4	1930 IN.				BETA =			
LREF =	2.1020 IN	I. YMRP	-	0000 IN.				RUDDER =	.000	CONFIG :	3,000
BREF =	4,0300 IN	i. ZHRP		0000 IN.				ELEVIR =	000.	RUDFLR #	10,000
SCALE =	.0040							IBDELY =	10,000 10,000	OBDELV :	10.000
								OBDAIL :	.000	AILRON : '	.000
		RUN 1	40. 187/ C) RN/L =	4.95 GRA	DIENT INTER			, 000	ISOMIC "	.000
MACH	ALPHA	CN	CLM	CY	CYN	CBL.	CAF	CAB	Cr.	60	L/D
.895	.630	.19950	08870	.02020	00000	.00050	.04540	.02530	.19880	.04830	4,11390
.595	2,800	.26900	-,09420	.01650	~.0004B	.00020	.04370	.02510	,28650	.05780	4,95650
.895	4,900	.38510	-,10370	.01630	.00030	.00040	.03690	.02460	.36030	.07170	5.29880
.595	7,030	,49620	11820	,01330	.00020	.00100	.03360	.02480	.49030	.09440	9,19110
.695	9.130	.58410	12030	.01400	.00010	.00090	.03180	.02710	.57170	.12410	4.60400
.595	11,220	.67080	12460	,01060	.00000	.00110	.03120	.02930	.65190	.16110	4,04520
.595	13.310	.76170	-,12880	.00720	.00010	.00150	.02990	.03200	.73430	.20450	3,58940
.595	15,370	.82470	12040	.00650	00010	.00220	.02850.	.03650	.78760	.24630	3.19730
.595	17.490	.89700	11490	.00460	00000	.00260	.02668	,04280	.84750	.29510	2.87140
.595	19.540	.94620	10770	.00280	00180	.90120	.02500	.05000	.88330	.34010	2.59660
.595	21,530	.97500	09510	,00200	00120	00150	.02290	.05770	.89860	.37920	2,36950
. 595	11.220	.47180	12180	.00890	.00070	.00140	.93110	.02970	.65290	.16130	4.04690
	GRADIENT	.04560	~,60369	~,00096	,00027	00002	00160	00017	.94460	.00576	.28972
		RUN N	D. 186/ 0	RN/L =	6.30 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	Ф	L/D
.905	.830	.12320	06110	.02340	00110	.00020	.06180	.03460	.12230	.06360	1,92180
.905	2,880	.22650	07480	.01970	00020	.00040	.06010	.03410	.22320	.07140	3,12290
.905	5,100	.36050	~.09490	.01660	.00000	.00110	.05790	.03360	.35400	.08980	3.94110
,905	7.340	.49420	-,11550	,01120	.00050	.00280	.05300	.03426	,48330	.11580	4.17300
.905	9.520	.60450	12460	.00810	.00030	.00260	.05380	,03950	.56720	.15320	3.83260
.905	11.710	.70060	-,13060	.60160	.00140	.00460	.05470	.04270	.67480	.19580	3,44530
.905	13.920	.61120	-,14130	00660	.00270	.00720	.05660	.04890	.77370	.25020	3.09210
.905	16,080	.90050	-,14260	01480	.00390	.00790	.05780	.05470	.84920	.30500	2.78370
.905	18.260	.97160	13000	00570	DODAD	กกรดก	ORTED	00070			

GRADIENT

.03883

-.00694

-.00112

.00019

-.00005

MSSS (FAS) WAR ATT CRB (BICIDIFIHI) (MEI) (VIKIRI)

(R76309) (03 NOV P2)

						•			(8143)	18) (US H	DA NE)			
	REPERE	HCE DATA						PARAMETRIC DATA						
SREF .	7.4190 8			.4530 IN.				BETA =	,000	CONFIG =	\$.000			
LREF *	2,1020 1			.0000 IN.				RUDDER =	.000	RUDFLR =	10,000			
BREF #	4.0300 (1	1. ZHRF		.0000 IN.				ELEVIR =	10,000	OBDELV =	10,000			
BCALE =	.9040			•				TROELY =	10,000	AILRON =	.000			
			_					CBOAIL =	.000	180AIL =	.000			
		RUN	NO. 185/	0 RN/L =	6.69 GRA	DIENT INTER	VAL = -5.0	00/ 5.00			-			
МАСН	ALPHA	CN	CL.M	CY	CYN	CBL	CAF	CAB	GT.	60	Ĺ/o			
1,197	.000	.15190	-,06900	.01370	.00070	.00110	.09250	.04570	,15040	.09480				
1,197	3.030	.26260	10150	.01120	.00170	.00120	.09520	.04460	,27730	.11000	1.58560 2.52040			
1,197	3,280	.41900	15590	.00640	.00230	.00110	.09530	.04450	.40840	,13350	3.05930			
1,197	7.560	.55420	16320	0es00.	.00290	ae000.	.09450	.04600	.53690	.16660	3,22200			
1.197	9,620	.68810	19020	00170	.00370	.00100	.09420	.04970	.66200	.21020	3,14910			
1.197	12.090	.82110	-,21310	-,00790	.00400	.00180	.09760	.05020	.78250	.26740	2,92540			
1,197	14.340	.93640	22110	01120	.00430	aenop.	.10060	.05360	.68230	.32950	2,67760			
1.197	16.550	1.03140	22140	~.01470	.99490	.00430	.10100	.95660	.95980	.39070	2,45640			
1.197	18,830	1.14080	-,22530	02000	.00510	.00360	.10440	.05770	1.04600	.46720	2.23890			
1,197	21.040	1,22120	22120	02310	.00410	.00410	.10270	.06010	1.10290	,53440	2.06380			
1,197	23,000	1.25640	20200	02240	.00410	.00230	.09650	.06450	1.11790	.58140	1,92250			
1,197	12,090	.82530	21310	00750	.00410	.00200	.09730	.05090	.78660	.26620	2.93250			
	GRADIENT	.06117	01519	00117	.00047	.00005	.00126	00051	.05930	.00710	.43682			
		RUN	NO. 145/	O RN/L =	6.80 GRA	DIENT INTERV	/AL = -5.0	0/ 5.00						
MACH	ALPHA	CN CN	Q.M	CY	CYN .	CBL	CAF	CAB	a.	60	1.70			
1.956	,790	.08470	05330	.01480	.00070	.00000	.07740	.02620	.08360	.07860	1.06320			
1.956	2.850	.16470	06760	.01250	.00110	~.00010	.07840	.02630	.16060	.08650	1,65570			
1.956	\$.050	.25350	08510	.00990	.00160	.00020	00000.	.02730	.24540	.10290	2,38360			
1.956	7.250	.33490	10000	.00700	.00220	.000030	.08260	.02810	.32180	,12430	2,58900			
1,956	9.420	.41360	-,11350	,00520	.00280	.00060	.08420	.02820	.39420	.15080	2.50300			
1.956	11.610	.49540	12760	.00320	.00320	.00090	.08580	.02730	.46790	.18380	2.54550			
1.956	13.600	.57970	~,14080	.00150	.00300	.00150	.08700	.02690	.54210	.22280	2.45500			
1,956	15.980	.65400	14680	-,00140	.00310	.00190	.08580	,02750	.60500	.26260	2,30380			
1.956	18.220	.73720	15940	~.00460	.00270	.00270	.08480	,02740	.67370	.31110	2,16510			
1.956	20.350	,80640	16160	-,00710	.00320	.00300	.08330	.02680	.72710	.35850	2.02780			
1.956	22.460	.88770	17180	01010	.00410	.00410	.08310	.02810	.78860	.41610	1,89510			
1.956	11.590	.48620	12110	.00420	.00510	.00080	.08430	.02740	.45930	,18040	2.54570			
	GRADIENT	.03883	- 00604	- 00442	00040									

.00005

.00049

.03736

.00383

MSSS (FAS) NAR ATP ORB (BECEDIFINE) (MEEL) (VEKERE)

(R76309) (03 NOV 78)

	REFEREN	CE DATA							PARAMETRIC	DATA	
ALF .	7,4190 80		- • •	530 IN.				BETA =	.000	CONFIG =	3.000
REF =	2,1020 (N		•	000 IN.				RUDDER =	.000	RUDFLR =	10.000
SREF =	4,0300 IN	. ZHRF	0. = •	000 IN.				ELEVTR =	10,000	CBDELV =	10.000
KALE *	,0040							IBOELV =	10,000	AILRON =	.000
								CEDAIL =	.000	1BDATL 3	.080
ē.		RUN	NO. 157/ 0	RN/L =	4,11 GR	DIENT INTER	NVAL = -5.0	0/ 5.00			
МАСН	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	69	L/B
2,990	.660	.02860	04320	.00870	.00130	00040	.07110	.01270	.02770	.07150	.38850
8.990	2,620	.06050	-,04910	.00830	,00140	00020	.07150	.01310	.07720	.07510	1.02770
2.990	4,720	.14050	-,05410	.00720	.00170	.00000	.07140	.01330	.13410	.06270	1.62150
2.990	6.760	.19760	-,06310	.00550	.00160	.00000	.07110	.01340	.18780	00500.	1,99870
2.990	0.00	.25970	-,07100	.00340	.00180	.00020	.07090	.01360	.24560	.11000	2,23150
2.990	10.930	.32370	07970	.00250	.00200	,00040	.07070	.01350	.30440	.13090	2.32570
2.995	15,040	.39330	08800	.00150	.00210	.00000	.07100	.01350	.36710	.15800	2,32360
R. 990	15,100	.46360	09930	-,00180	.00230	00000	.07130	.01340	.42900	.18970	2,26150
8,990	17.230	.54030	10970	00360	.00260	.00130	.07140	.01330	.49480	.22830	2.16710
2,990	19.300	.61640	-,12140	-,00660	.00360	.00120	.07200	.01340	.55800	.27160	2.05270
2.990	21,290	.69390	-,13820	00740	.00390	.00150	.07280	.01360	.62010	.31980	1.93850
	GRADIENT	.02757	-,00266	+,00037	.00010	.00010	,00007	.00015	.02622	.00277	.30345
		RUN	NO. 136/ 0	RN/L =	4.84 GRA	DIENT INTER	VAL = -5.00	3/ 5.00			
MACH	ALPHA	- CN	CLM.	CY	CYN	CBL	CAF	CAB	Œ.	Ф	L/D
4.959	.640	-,60810	-,03270	.00570	.00130	.00000	.06300	.00310	00890	.06290	14160
4.959	2,570	.0359O	03800	.00570	.00120	00010	.06160	.00320	.03110	.06310	.49310
4.959	4.650	.07710	04120	.00500	.00140	.00020	.06170	.00330	.07180	.06780	1.06010
4.959	6,660	.12090	04660	.00270	.00150	.00000	.06110	.00350	.11300	.07470	1.51270
4.959	6.690	.17100	-,05430	.00100	.00190	.00020	.05960	.00360	.16010	.08470	1.88840
4.959	10.750	.22390	~.06030	.00030	.00190	.00040	.05670	.00350	.20910	.09940	2.10350
4.959	12.790	.26500	06680	~.00080	,00270	De000.	.05960	.00360	.26290	.12020	2.18600
4.959	14,810	.54010	07400	00200	.00270	.00100	:05920	.00370	.31360	.14420	2,17490
4,959	16.900	.40600	-,08480	00320	.00270	.00120	.05960	.00370	,37290	.17580	2,12060
4,959	18.950	.47720	09630	~.00600	.00530	.00140	.06130	.00380	.43140	.21300	2.02500
4.959	20,890	.54650	10710	00830	.00360	.90120	.06300	.00380	.48810	.25380	1.92280
•	GRADIENT	.02135	00212	-,00018	.00003	.00005	00032	.00005	.02022	.00124	.30089

MSSS (PAS) NAR ATP CRB (BECIDIFINE) (MEE) (VIKIRE)

MALE L	BUKE	UATA

PARAMETRIC DATA

AREF =	7,4190 80	3.1H. 194RI		.4538 IN,				BETA =	.000		
REP =	2,1020 (4. YMRI	*	.0000 IN.				RUDDER =	-	CONFIG *	3,000
REF =	4.0300 th	4. ZMRI	*	.0000 IN.				ELEVIR *	.000	RUDFLR =	10,000
KALE #	.0040							IBDELV *	10,000	CBDEFA =	10,000
									10,000	AILRON =	.000
								CBDAIL =	.000	IBDAIL =	7000
		RUN	NO. 168/	O RN/L #	4.95 GR	DIENT INTE	RVAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	Q_M	CY	CYN	CBL	CAF	CAB	CL.	_	
.593	22,040	.96430	06530	01210	.00390	00260	.05560	.05760	.88530	CD	L/D
.593	23,970	.99160	07990	01260	.00460	00230	.02020	.06140	.89780	.36290	2,31170
.593	26.020	1.04210	06190	-,00480	.00500	00280	.01810	.06470	.92848	.42140 .47350	2,13010
.593	28,100	1.09130	08420	.00650	.00150	00640	.01660	.06760	.95460		1.96050
.593	30,150	1,15490	-,09600	.00210	.00760	00910	.01640	.07140	.99030	.52870 .59440	1.80580
.593	32,230	1,22860	10170	~.01660	.01190	00420	.D1330	.07380	1,03230		1.66590
.993	34,310	1.31230	10050	02650	.01000	.00200	.01030	.07570	1,07800	.66660 .74840	1.54840
.593	36.360	1.37000	09710	02440	.00650	.00240	.00580	.07760	1,09970	,81700	1.44040
.993	38,490	1,43970	09900	02240	.00480	.00120	00020	.07920	1,12700		1.34600
.593	40,530	1.50160	-,10030	02320	.00560	~.00020	00550	.08120	1.14480	.89580	1.25790
.593	42.530	1,56260	-,10060	02510	.00600	.00020	01000	.08160	1.15620	.97170	1.17610
.593	32,240	1.23860	10190	01630	.01200	~.00380	.01500	.07410	1,03970	1.04690	1,10420
	GRADIENT	.03061	-,00106	00111	.00013	.00028	~.00154	.00118	.01467	.67370	1.54310
								.00110	10410.	.03321	05772
		RUN	NO. 189/	0 RN/L =	6.29 GRA	DIENT INTER	VAL = -5.00	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CEL	CAF	CAB	α.	CD.	
.902	22.920	1.04920	08690	01340	.00380	00280	.05390	.06730	.94530	_	L/D
.902	24.940	1.11460	08570	01450	.00480	~,00100	.05140	.06920	.98890	.45840 .51670	2.06180
.902	27.070	1,17940	-,09090	02040	.00690	.00000	.05010	.07040	1.02730		1.91400
.902	29,190	1.25810	09990	02570	.00990	.00030	.04800	.07190	1.07480	.58140 .65570	1.76670 1.63920
.902	31,390	1,34510	10060	03630	.01130	.00460	.04640	.07090	1,12390	.74040	
.902	33,550	1.42970	09830	-,04060	.01160	.00620	.04260	.07210	1.16790	.82590	1.51780
.902	35,690	1,50470	09380	05350	.00818	.00800	.03550	.07380	1.20130	.90680	1,41410
.902	37.810	1.55900	08470	01610	.00150	.00270	.02640	.07610	1,21540	.97680	
.902	39.940	1.60410	06140	-,00900	00040	00150	.01970	.07670	1,21700	1.04510	1.24420
.902	42,010	1.66170	~.08360	-,01400	.00140	00110	.01480	.07570	1.22450	1.12330	1.10450
.902	44.080	1.72370	~.08260	01910	.00210	~.00020	.01020	.07540	1.23100	1,20650	1.02030
.902	33.530	1,42740	09640	~,04110	.01170	.00840	.04140	.07230	1.16890	.82300	1.41780
	GRADIENT	.03244	.00041	.00012	~.00027	.00007	~.00218	.00041	,01410	.03572	
							_			. 55572	~.04822

-.04822

4,959

4.959

39.898

41,870

GRADIENT

1.33830

1,42500

.04235

-,22960

-.24510

-.00866

-.03000

-.03230

-.00114

(03 NOV 72)

(R76310)

MSSS (FAS) HAR ATP ORB (BICIDIFINI) (ME1) (VIKIRI)

	REFEREN	KE DATA							PARAMETRIC	DATA	
SRET 1	7,4190 80		3.4	30 IN.			•	BETA =	.000	CONFIG =	3.000
LREP .	2,1020 IN	I. YHRP	* .0	000 IN.				RUDDER =	.000	RUDFLR =	10,000
BREF 4	4,0300 IN	. ZHRP	* .0	900 IN.				ELEVTR =	10,000	. OBDELY =	10.000
SCALE =	.0040							18DELY =	10,000	AILRON =	.000
								CBDATL =	,000	IBDAIL =	.000
		RUN F	Ю, 136/O	RN/L =	4,11 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	C L	69	L/D
2.990	21,630	.66630	13390	00800	.00418	.00110	.07160	.01390	.61230	.32250	1,89870
2.000	23,600	.76450	14500	01010	.00450	.00110	,07240	,01410	.67030	.37480	1,78820
2.490	25.920	.65030	15880	01360	,00540	.00120	.07330	,01430	.73270	.43770	1.67390
2.990	26,020	.93640	-,17063	01660	.00600	.00150	.07470	,01440	.79550	.50690	1.56490
2,990	30,130	1,02770	18440	01840	.00580	.00170	.07580	.01440	.85080	.58150	1,46300
2.990	32.230	1,12020	19790	-,01830	.00460	.00550	.07750	,01450	.90630	.66300	1,36690
2,990	34,370	1.21590	21010	01620	.00360	.00470	.07900	,01450	.95890	.75170	1,27560
2,990	36,460	1,30960	22450	02160	.00330	.00540	.08080	.01450	1,00520	.84330	1,19190
2.990	36,610	1,40640	P2065	02710	.00520	.00470	.08230	.01460	1.04750	.94210	1,11160
2,990	40,700	1.49620	25090	03250	.00610	.00470	.08380	.01460	1.08110	1.04050	1,03890
2.990	42,700	1,56500	26230	03590	.00670	.00430	.08490	.01430	1,10710	1,13740	,97330
	GRADIENT	.04334	-,00626	-,00121	.00005	.00023	.00067	.00002	.02420	.03935	-,04431
		RUN P	D. 135/ D	RN/L =	4.79 GRA	DIENT INTERV	VAL = -5.0	0/ 5.00		:'	
MACH	ALPHA	CN	CT.H	CY	CYN	CBL	CAF	CAB	CL.	69	L/D
4.959	21,420	.58460	10870	00950	.00350	.00110	.06440	.00320	.50210	.26610	1,88620
4,959	23.370	.63880	11820	01010	.00390	.00130	.06620	.00340	.56010	.31420	1,78240
4.959	25,440	.72010	+,13050	01250	.00440	.00150	.06900	.00350	.62060	.37180	1,66910
4.959	27.520	.60480	14350	01540	.00420	.00190	.07120	.00360	.68070	.43510	1.56450
4,959	29.560	.89060	15720	01720	.00390	,00230	.07460	.00370	.73780	.50440	1.46280
4,959	31,620	.97810	17050	01840	.00470	.00270	.07790	.00370	.79190	.57920	1.36720
4.959	33,660	1,06830	18710	02240	.00480	.00270	.08100	.00570	.84400	.65990	1,27880
4,959	35,740	1.15760	19950	02420	.00530	.00280	.08410	.00360	. 89030	.74460	1,19560
4,959	37,870	1.25140	21440	02650	.00540	.00290	.08680	.00350	.93500	.83620	1.11810

.00610

.00650

.00013

.00290

.00330

.00011

.08790

.08970

,00131

.00360

.00350

.00001

.97040

.02478

1.00130

.92580

.03702

1,01790

1.04820

.98560

-,04432

MSSS (FAS) MAR ATP CRB (BICIDIFIHI) (MIEI) (VIKIRI)

(RT6311) (03 NOV 7E

	REFERE	HCE DATA							PARAMETRIC	DATA	
SREF .	7,4190 8	a.IN. XHRI		530 IN.				* AT38	,000	CONFIG =	3,000
LREF =	2.1020 (1	4. YHRI	0, *	000 IN.				RUDDER =	.000	RUDFLR =	10,000
BREF &	4,0500 (1	4. 21481	9, = 4	000 IN.				ELEVTR =	-20.000	CRDELY 2	-20,000
SCALE =	.0040			-				180ELV =	-20.000	ATLRON =	.000
								OBDAIL ≈	.000	180AIL =	.000
		RUN	NO. 42/ 0	RN/L =	4.97 GRA	שופאז ואופו	RVAL = -5.0	00, 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	00	L/Ó
.597	.430	41090	ozeos.	.03540	00600	00110	.06580	.02650	41130	.06270	-6,55330
.597	2.420	32540	.20260	.03630	00560	00060	.06500	.02640	-,32760	.05120	-6,40110
.597	4.530	23440	.19520	.03260	00510	.00000	.06010	.02740	23840	.04130	-5.76040
.597	6.650	-,14390	.19120	.03500	00510	.00070	.05520	.02450	-,14930	.03810	-3,91030
.597	6,720	05660	.18660	.05120	00490	.00130	.04780	.02360	06320	.03870	-1,63470
.597	10.630	,04700	.17620	.02820	00510	.00110	.04160	.02260	.03840	.04970	.77260
.597	12,940	,15640	.16780	.02610	00460	.00110	.03540	.02310	,14450	.06960	2.D7560
.597	15,030	.25710	.15950	De050.	-,00440	.00180	00000	.02460	.24080	.09470	2,54180
.597	17,230	.37250	.15260	00000.	00470	.00220	.02200	.02850	.34930	.13130	2.65880
,597	19,290	.46890	.14360	.01700	00500	,00200	.01960	.02870	.43600	.17340	2.51430
.597	21,270	.54980	.13860	.01130	00380	.00100	.01470	.03260	.50700	.21320	2.37730
.597	10,840	.05230	.17810	.02900	00480	00000	.04090	.02310	.04370	.05000	.87380
	GRADIENT	.04305	00344	00064	.00022	.00027	00140	\$2000.	.04217	00521	· ·
										-,00321	.19450
		RUN	NO. 41/0	RN/L =	6.28 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA -	CN	CLH .	CY	CYN	CBL	CAF	CAB	CL.	œ	L/D
.902	.290	41600	.24160	.03540	-,00720	00370	.09220	.04700	41850	.09000	-4.64510
.902	2,380	-,30600	.22590	.05550	00660	00360	.08880	.04490	~.30940	.07600	-4.06740
.902	4,600	16960	.21930	.03000	00590	~.00200	.08000	.04370	+,19540	.06450	-3,02670
.902	6,840	05230	.18820	.02740	00530	00110	.07000	.04180	06030	.06320	95290
.902	9.060	.09060	.16790	.02320	00450	.00000	.06150	.04150	.07980	.07510	1.06310
.902	11.290	.22480	.15270	.01710	00390	.00000	.05550	.04250	.20960	.09840	2.12620
.902	13,510	.35940	.13140	.00950	00290	.00060	.04950	.04190	.33790	.13210	2.55660
.902	15.730	.47790	.12270	00120	000000	.00130	.04610	.04550	.44750	.17400	2.57070
.902	17.940	.56240	.12880	.00090	00500	.00070	.04710	.04700	.52050	.21810	2.38660
.902	20,060	.62650	.14500	.00500	00360	00110	.05450	.04900	.56980	.26610	2,14080
.902	22.050	.66800	.15570	-,00230	00010	00070	.05010	.05510	.60040	.29720	2.01980
.902	11,300	.23020	.15020	.01670	~.00420	00020	.05450	.04150	.21510	.09860	2,18160
	GRADIENT	.05299	00726	00126	.00050	.00040	00284	00076	.05176	00591	.37646

22.330

11,440

GRADIENT

1.961

1,961

-.00476

.00980

-.00101

.00190

.00040

.00019

.00150

-.00060

-.00016

.05290

.07250

-.00201

.02640

.02760

.00058

.63030

.29470

.03634

.31620

.13360

-,00049

1.99330

2,20460

.37921

-.03230

.00260

-,00634

.70520

.31530

.03790

MSSS (FAS) HAR ATP ORB (BICIDIFINI) (WIEL) (VIKIRE)

					MIL OUR INICIDIATELI (MIETI (AIKIKI)				(R76311) (03 HOV 72)		
	REPERÈNCE DATA										
SAEP &	7.4190 8			1530 IN.				BETA =	.000	CONFIG =	3.000
LREF W	R.1020 1		and the second second	0000 IN.				RUDDER =	.000	RUDFLR =	10,000
BREF =	4.0300 1	N. ZWRF	• • •	2000 IN.				ELEVTR =	000.03-	CEDELY =	-20.000
SCALE =	,0040					•		IBDELY =	-20,000	AILRON =	.000
								CEDAIL =	.000	IBDAIL =	.000
		RUN	NO. 40/ 0	RN/L =	6.67 GR	DIENT INTER	EVAL = -5.0	00, 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	Cr.	· CD	L/0
1,199	.400	-,31900	.22410	.02080	-,00580	.00000	.12780	.04410	31990	.12550	-2,54860
1.199	2,560	-,18040	.19330	.02780	00560	.00000	.12120	.04560	-,18570	,11300	-1.64240
1,199	4,850	05660	.15950	.02700	00520	~,00040	.11350	,04630	04630	.10990	42120
1,199	7,140	.11500	.12430	.02110	00380	00070	.10400	.04880	.10110	.11750	.86120
1.199	9,420	.26200	.09450	.01600	00260	00040	.09630	,05060	,24270	.13790	1.75900
1.199	11,700	.39880	.07270	.01280	00260	00000	.09160	.05200	,37190	.17060	2,17940
1.199	13,970	.55290	.04960	.00860	00250	.00090	.08830	.05170	.49580	.21440	2.31180
1,199	16.240	.66200	.03170	.00290	00160	.00180	.08610	.05200	.61150	.26780	2.28310
1,199	18,520	.77130	.02140	.00300	-,00270	.00090	.08150	.05420	.70550	.32240	2.16820
1.199	20,710	.66510	05810.	00310	00130	.00340	.07580	.05570	.78240	.37690	2,07550
1.199	22.610	.94490	.01600	~,00448	00110	.00160	.07320	.05440	,84250	.43390	1,94140
1,199	11.700	.40280	.06920	.01270	00270	~.00050	.09160	.05140	.37580	.17140	2,19210
	GRADIENT	.96341	01452	-,00040	.00014	00009	-,00321	.00049	.06148	00348	.47862
		RUN !	NO. 101/0	RN/L =	7.15 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL.	CAF	CAB	· a_	G	L/b
1.961	.610	-,09470	.08980	,01940	+.00190	00010	.09770	.01860	09580	.09670	99080
1.961	2.670	01460	.05550	.01750	00160	00070	.09210	.02000	01890	.09130	20720
1,961	4.860	.06720	.04270	.01510	00110	00060	.08910	.02110	.05940	.09450	2072G
1,961	7,060	.14990	.02860	.01290	00026	08000. ÷	.08350	.02300	.13850	.10130	1,36640
1,961	15.810	.47310	01760	.00540	.00050	+.00040	.06430	.02780	.43770	.19090	2,29240
1.961	9.250	.23240	.01510	.01130	.00000	00070	.07860	.02470	.21670	.11490	1,88480
1.961	11.450	.31180	.00250	.00910	.00060	00050	.07340	.02690	.29100	.13370	2.17540
1.961	13,650	.39370	- .007 80	.00810	.00060	00050	.06840	.02790	,36640	.15940	2.29860
1,961	15.810	.47310	01760	.00540	.00050	00040	.06430	.02780	,43770	.19090	2.29240
1.961	18,030	.54680	02080	.00300	.00050	00010	.06020	.02660	.50120	,22650	2,21240
1,961	20,240	.62800	02690	00080	.00100	.00000	.05670	.02610	.56960	.27060	2,10490

.02165

-.00242

-,00033

.00010

.00020

-,00208

.00008

.02054

-.00175

.28405

MSSS (FAS) HAR ,ATP ORB (BICIDIFIHI) (WIEI) (VIKIRI)

(R76311) (03 NOV 72)

REFERENCE	DATA	

PARAMETRIC DATA

REPERENCE DATA					PARAMETRIC DATA						
sper .	7.4190 80			30 IN.				BETA =	.000	CONFIG =	3.000
LREF =	E.1020 IN	-		000 IN.				RUDDER *	.000	RUDFLR =	10.000
BREF =	4.0300 IN	i. ZHRP	.0	000 IN.				ELEVTR =	-20.000	OBDELA =	-20.000
SCALE =	,0040							IBDELY =	-20.000	AILRON =	.000
								CBDAIL =	.000	IBDAIL =	.000
	•	RUN	NO. 116/ 0	RN/L =	4.14 GRA	DIENT INTER	RVAL = -5.0	0/ 5,00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	c o	L/D
2.990	.640	07030	.02860	.01140	00060	00160	.08350	.01090	-,07130	.08270	66220
2.990	2.560	01790	.02300	.00930	00050	00160	DrerD.	.01150	~.02150	.07890	27260
2.990	4.670	.03790	.01790	.00760	00000	-,00130	.07630	.01200	.03150	.07910	.39870
2.990	6.740	.09450	.01370	.00770	.00010	00110	.07290	.01280	.08530	.08350	1,02150
2,990	8,810	.15420	.00760	.00590	.00000	00110	.06920	.01530	.14180	01260.	1.53920
2.990	10,690	.21570	00500.	.00580	.00010	00080	.06570	.01340	.19940	.10530	1.69290
2.990	12,990	.27650	~.00080	.00400	.00010	00050	.06220	,01346	.25740	.12320	2,08820
2.990	15.050	.34240	~.00590	.00160	.00020	~,00040	.05930	.01320	.31530	.14620	2.15570
2.990	17,200	.41090	00920	.00040	.00070	-,00050	.05650	.01310	.37580	.17550	2,14070
2.990	19,250	.47990	01350	00170	.00120	00030	.05380	.01330	.43530	.20900	2.08210
2.990	21,210	.54750	01620	00410	.00140	00040	.05100	.01360	.49190	.24570	2.00190
	GRADIENT	.02685	00265	00089	.00015	.00008	00178	.00027	.02551	00086	.31299
		RUN	NO. 115/ 0	RN/L =	4.87 GRA	DIENT INTER	RVAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM .	CY	CYN	CBL	CAF	CAB	CL.	æ	L/D
4,959	.620	07910	.01510	.00660	00040	00160	.07350	.00280	-,07990	.07260	-1,10110
4.959	2,550	-,04070	.01230	.00710	.00010	-,00110	.06920	.00300	04376	.06730	6497G
4,959	4.600	.00700	.00550	.00530	.00000	00080	.06520	.00310	.00180	.06560	.02750
4.959	6,640	.04880	.00270	,00410	.00060	00060	.06100	.00320	.04140	.06620	.62530
4.959	8,670	.09490	00070	.00230	.00080	00010	.05690	.00550	.08530	.07050	1.20830
4,959	10,710	.14480	-,0 0080	.00270	.00090	.00000	.05310	.00530	.13230	.07910	1.67300
4.959	12,770	.19530	00490	.00150	.00070	.00020	.05250	.00130	.17890	.09440	1.89450
4.959	14.790	.24710	90730	00020	.00070	.00058	.04980	.00240	.22620	.11130	2.03230
4.959	16,870	,30430	00900	00320	.00120	.00070	.04800	.00280	.27720	.13430	2,06370
4,959	18,900	.36250	00950	00390	.00140	.00080	.04680	.00300	.32760	.16180	2,02570
4.959	20,840	.42200	01180	-,00450	.00170	.00000	.04680	.00310	.37770	.19390	1.94770

.03315

-.00060

.00201

-.00029

-.00032

-.00342

.00088

.01930

.02970

-.04126

MSSS (PAS) HAR ATP ORB (BICIDIFINI) (MIEI) (VIKIRI)

ORB	(BICIDIFINI) (MIEI) (VIKIRI)	(876312)	•	03 NO	4 TE	•	

	REFEREN	KE DATA							PARAMETRIC	DATA	
SACF .	7.4190 80	2.1N. XMRP	3,4	530 IN.				GETA =	.000	CONFIG =	3,000
LREF #	2,1020 (F	t. YHRP	.0	000 IN.				RUDDER =	.000	RUDFLR :	10,000
BREF *	4,0300 IN	i, zier	* .0	008 IN.				ELEVIR =	-20,000	CEDELY :	-50.000
SCALE *	.0040							IBOELY =	-20,000	ATLRON :	.000
							,	CBDAIL =	.000	IBDAIL #	.000
		RUN	NO. 33/0	RN/L =	5.00 GR	WIENT INTER	RVAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	Cr.	Ф	L/0
.595	21,640	.56690	.15140	00560	.00070	,00100	.01270	.05330	.52150	.22270	2,34160
,695	23.770	.62180	.12340	00690	.00320	00150	.00850	.03680	.56560	.25850	2.18780
,595	25,650	.67590	,11860	00460	.00200	.00010	.00640	.03880	.60540	.30050	2.01450
.595	27,900	.73110	.11200	.00450	.00010	~,00430	.00610	.04460	.64320	.34760	1.65040
.595	29,960	.79230	.09650	.00210	.00440	00170	.00110	.04830	.68580	.39670	1.72880
.595	32,040	.67600	.09040	01080	00000	~,00450	00560	.05350	.74720	.46100	1.62070
.595	34,140	.95200	.08850	01590	.00690	.00130	00890	.05700	.79290	.52690	1,50480
.895	36.200	1.05230	.09130	-,01430	.00620	.00250	01720	.06010	.84310	.59580	1,41490
.895	36,320	1.09810	.09150	01320	.00590	.00150	02580	.06190	.87750	09088.	1.32830
.595	40,360	1,16300	.06930	01410	.00590	.00000	03530	.06500	00800.	.72630	1,25140
.595	42.320	1.21910	.06530	01160	.00640	00150	-,04340	.06620	.93060	.78860	1,17990
.595	38,040	.86060	.08980.	01200	.00910	00420	00550	.05330	.74940	.46250	1.62010
	GRADIENT	.03266	00219	00062	.00029	.00009	00268	.00170	.02090	.02824	05597
		RUN 1	NO. 34/ 0	RN/L =	6,31 GRA	DIENT INTER	VAL = -5.00	5,00			
MACH	ALPHA	CN	CL.M	CY	CYN	CBL	CAF	CAB	a.	Ф	L/D
.903	22.630	.67140	.15530	00720	.00150	00050	.05040	.05470	.60030	.30490	1.96640
.903	24.600	.72240	.15390	00660	.00200	00030	.04830	.05760	.63670	.34480	1.84660
.903	26.770	.00200	.14750	01040	.00390	.00000	.04960	.06000	.69440	.40610	1.70990
.903	28.910	.86270	.14340	01860	.00640	.00230	.04990	.05890	.74850	.47060	1.59030
.903	\$1.960	.95410	.14920	-,03220	.01020	.00850	.04500	.06300	.79390	.53100	1.49520
.903	33.220	1.03250	.14800	~,03530	.00870	.01060	.03890	.06540	.84240	.59820	1,40800
,903	35.350	1.10550	,14820	~,03480	.00610	.01180	.03140	.06680	.88340	.66540	1.32760
.903	37.460	1.15450	.15750	00920	00060	.00400	.02110	.06980	.90340	.71900	1,25650
.903	39.640	1.22130	.15830	.02890	00520	00820	.00780	.07220	.93540	.78520	1.19130
.903	41,720	1,29690	.14610	.03070	00050	00780	00900	.07190	,97410	.85630	1.13740
.903	43.760	1,37400	,12120	.03030	00200	-,00600	02470	.07210	1.00930	.93260	1.08220
.903	33,210	1.02850	.14610	03410	.00880	.01040	.03780	.06520	.83980	.59500	1,41120
	CRADIENT	.03316	- 555	55054	00000				_		

41,630

GRADIENT

1.18280

.03652

-.04900

-.00195

-,02580

-.00098

MSSS (FAS) NAR ATP CRB (BICIDIFINI) (MEI) (VIKIRI)

		•	ATE CHE (BIC	SICIDIAINI) (MIEI) (AIKIBI)				(R76312) (03 NOV VZ)			
	REFERE	HCE DATA						PARAMETRIC DATA			
SACT à	7,4190 50	4, EN, 304RF	* \$,4	330 EN.				BETA =	.000	CONFIG =	3.000
LREF *	2.1020 1			300 IN.				RUDDER =	.500	RUDFLR =	10,000
BREF =	4.0300 11	N. ZMRP	.00	.NJ 000				ELEVIR =	-20,000	OBDELV =	-20,000
SCALE =	,0040							IBDELV =	-20,000	AILRON =	.000
								OBDATL =	.000	IBDAIL =	.000
		RUN	NO. 117/ 0	RN/L =	4.13 GRA	DIENT INTER	VAL = -5.	00/ 5.00			
MACH	ALPHA	CN CN	CLM	CY	CYN	CBL	CAF	CAB	a.	œ	L/0
2.990	21.770	.54170	01970	00440	.00140	00030	.05000	.01340	.48450	.24740	1,95810
2.990	23,740	.61020	02450	00620	00100.	00030	.04750	,01360	.53940	.26900	1,86620
2.990	25.650	.68430	02760	00870	.00280	00010	.04490	.01370	.59620	.33690	1.75920
2.990	27.970	.76310	-,05340	01180	.00330	00010	.04190	.01390	.65430	.39510	1.65590
2.990	30,060	.64160	03670	~,01270	.00330	.00040	.03950	.01380	.70860	.45580	1,55440
2,990	32.160	.92170	-,04100	01270	.00170	.00190	.03700	.01370	.76050	.52200	1.45690
2.990	34,290	1.00700	04410	-,01200	.00070	.00300	.03450	.01360	.81250	.59590	1.36350
2.990	36,370	1.08960	-,04870	01450	.00020	.00360	.03200	.01390	.85820	.67210	1,27690
066.5	36.520	1,17250	05160	02090	.00200	.00260	.02970	.01370	.69870	.75360	1,19250
Dee, \$	40,590	1.25350	-,05360	02530	.00350	.00170	.02720	.01350	.93410	.83630	1,11680
2.990	42.610	1.32590	05660	02840	Decoo.	.00150	.02540	.01330	.95860	.91640	1.04600
	GRADIENT	.03806	-,00176	00103	.00003	.00015	~.00119	00000	.02328	.03240	04426
		RUN 1	NO. 118/ G	RN/L =	4.87 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL.	CAF	CAB	a.	σ.	L/O
4,959	21,390	.44170	01150	00690	.00140	.00090	.04720	.00250	.39410	.20510	1.92140
4.959	23,340	.50510	01130	00700	.00170	.00140	.04630	.00290	.44540	.24260	1.83520
4.959	25,410	.57230	01620	01110	.00190	.00120	.04570	.00310	.49738	.28700	1.73280
4.959	27,460	.6411 0	01790	01120	.00220	.03160	.04620	.00310	.54750	.33680	1,62550
4.959	29.520	.71790	05550	01370	.00170	.00180	.04540	.00330	.60220	.39330	1,53120
4.959	31.560	.79370	02410	-,01500	.00200	.00190	.04500	.00330	.65250	.45410	1,43700
4,959	33,660	.87180	03020	01850	.00200	.00210	.04370	.00330	.70130	.51960	1,34960
4.959	35,700	.94940	03520	02030	.00240	.00190	.04250	.00320	.74610	.50850	1.26760
4.959	37.600	1.02960	04140	02320	.00270	.00180	.04150	.00320	.78600	.66390	1,18690
4,959	39,840	1,10650	04500	02390	.00320	.00170	.04020	.00310	.82370	.73980	1.11350

.00310

.00006

.00200

.00004

.03780

-.00041

.00310

20000.

.85590

.02297

.73980

.81710

.03014

1.11350

1.04740

-.04335

8,420

10,460

GRADIENT

.040

.68210

.68050

.69100

.00007

.15690

.15270

.16220

.00135

-,13700

-.16860

-.01900

-,01426

-.01300

-.02010

-.00030

-.00034

-.01760

-.02270

-.00150

-.00175

.907

.907

.907

MSSS (FAS) MAR ATP ORB (BICIDIFINI) (MIEI) (VIKIRI)

			M555	HSSS (FAS) MAR ATP ORB (BICIDIFINI) (WEEL) (VIKIRE)						(R76313) (03 HOV 72)			
	REFERENC	E DATA							PARAMETRI	C DATA			
SAEF #	7.4190 80.	IH, WRP		530 IN.				ALPHA =	20,000	CONFIG *	3.000		
LREP .	8,1020 IN.	. YHRP	× .0	1000 IN.	_			RUDDER =	.000	RUDFLR =	10.000		
BREF =	4,0300 IN.	ZMRP	■ .0	1000 IN.				DLEVIR =	-20,000	CBDELY =	-20,000		
SCALE =	.0040							TEDELY =	-20.000	AILRON =	.000		
								CBDAIL =	.000	IBDAIL =	.000		
		RUN N	o. 63/ 0	RN/L =	4.96 GR	ADIENT INTER	RVAL = -5.1	00, 5.00					
MACH	BETA	CN	CLM	CY	CYN	CBL.	CAF	CAB	CI.	69	L/D		
,1197	-10,080	.59240	.11930	.12920	-,00460	.01620	00130	.03410	.55140	.21650	2,54670		
.597	-8.130	.59200	.12420	.09800	-,00450	.01280	.00230	.03190	.54970	.21980	2.50050		
.597	-6.060	.50810	.13030	.06790	-,00360	.00940	.00360	.03350	.54550	.21960	2.48390		
.597	-4,020	,56670	.13690	.03670	00230	.00610	.00310	.03710	.54450	.21870	2,48900		
.597	-2,000	.96270	.14170	.00370	~.00020	.00190	.00470	.03900	.54010	.21870	2,46930		
.597	.020	.56970	.14660	02210	.00200	00100	.00840	.03770	.54520	.22480	2,42490		
.597	2.050	.59460	.14500	04340	.00260	00280	.00940	.03540	.54950	.22770	2.41310		
.597	4,060	.60110	.14360	~.06750	.00350	00390	.00768	,03430	.55600	.22840	2,43430		
.597	6,130	.61000	.13700	09650	.00380	00660	.00390	.03420	.56570	.22830	2,47790		
.597	6,160	.61130	.13290	12960	.00400	00990	.00250	.03120	.56740	.22740	2.49480		
.597	10,140	.61220	.13060	15490	.00190	01250	.00160	,02940	.56860	.22690	2,50540		
.597	.020	.59040	.14600	02210	.00210	00090	02890.	.03770	.54590	.22500	2,42570		
	GRADIENT	.00202	.00083	+,01264	.00072	00122	.00068	-,00046	,00160	.00141	00820		
		RUN NO	84/ 9	RN/L =	6.29 GRA	DIENT INTER	VAL = -5.0	00, 5,00					
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	αL	GD .	L/D		
.907	-10.350	.67010	.14110	.15170	.01110	.02070	.04550	.04840	.60260	.29670	2.03070		
, 9 GF	-8,340	.66140	.14600	.11250	.00920	.01650	.04640	.04930	.61250	.30210	2.02700		
.907	-6.190	.70500	.14570	.07530	.00260	.01320	,04620	.05270	,63420	,31150	2.03580		
.907	-4,090	.70890	.14850	.04200	00040	.00830	.04890	.05280	.63670	.31560	2.01750		
.907	-2.020	.70510	.19300	.01180	.00010	.00200	.05050	.05530	,63260	.31550	2.00470		
,907	.040	.70100	.16000	01710	00010	-,00110	.05050	.05820	.62870	.31400	2.00200		
, 907	2,120	.70490	.16150	04840	00200	00320	.04990	.05750	.63250	.31510	2.00200		
.907	4,190	.70970	.15800	07550	00290	00720	.04640	.05640	.63820	.31370	2.03430		
.907	6,300	.70350	.15660	-,10610	00590	01380	.04390	.05450	.63360	.30880	2.05190		
		47045						,05450	.00000	*30000	2.00190		

.05390

.05240

.05740

.00045

.04120

.04520

.04870

-,00027

.61500

,61200

.62040

.00014

.29780

.30070

.30830

-.00020

2.06510

2,03490

2.01210

.00135

.00040

-.01197

-.00140

-.00159

-.00006

-.00011

.00125

S2000.

.00057

MSSS (FAS) NAR ATP CRB (BICIDIFINI) (MIEI) (VIKIRI)

(R76313) (03 NOV 72)

BESTSELLT GATA		

PARAMETRIC DATA

BRET .	7,4190 84.	.IN. XMRF	* 3.4	530 [N.				ALPHA =	20,000	CONFIG =	3.000
REF .	8,1020 IN.	. YHRI	٥, * •	000 IN.				RUDOER =	.000	RUDFLR =	10,000
REF #	4,0300 IN.	. ZMRI	0, # 4	990 IN.				ELEVTR =	-20,000	CEDELY =	-20.000
BCALE .	.0040							1806TA =	-20,000	AILRON =	.000
								OBDATL =	.000	IBDAIL =	.000
								-			
•		RUN	NO. 85/ 0	RN/L =	4.68 GR	WIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	C.L.	65	L/O
1,196	-10,360	.93610	.00960	.13740	.99629	.02640	.06570	.05250	.83760	.42740	1.95970
11196	-6,360	.93930	.01530	.10170	.00670	.02100	.06750	.05280	.83790	.42980	1,94950
1,196	-6.220	.94200	.01630	.05610	.00760	.01510	.06770	.05290	.64010	.43130	1.94760
1,196	-4,110	.95310	.02540	.02880	.00430	.01160	.06990	.05470	.84930	.43610	1.93870
1.196	-2,020	.95600	.02150	00100	.00320	.06476	.07040	.05410	.85170	.43990	1.93580
1,196	.070	.95960	.02510	03000	.00220	00070	.07170	.05510	,65450	.44270	1.93020
1.196	2,160	.96530	.02290	05640	.00020	00440	.06890	.05620	.86070	.44250	1.94480
1.196	4.260	.96690	.02200	~.08500	~.00200	01080	.96740	.05630	.86270	.44180	1,95270
1,196	6,400	.97460	.02250	11430	00460	01690	.06700	.05620	.87000	.44470	1.95640
1,196	6.500	.97210	.02040	14550	,00760	02160	.06360	.05480	.86890	.44050	1.97270
1.196	10,520	.96890	.01830	17760	00910	02670	.06340	.05280	.86620	.43860	1.97360
1.196	.070	.95620	.02520	02920	.00150	00070	.06980	.05530	.85200	.43960	1.93810
	GRADIENT	.00176	-,00007	01353	00075	00258	00031	.00025	.00171	.00048	.00177
		RUN	NO. 102/0	RN/L =	7.16 GRA	DIENT INTER	VAL = -5.00	0/ 5,00			
MACH	BETA	CN	CLM	. CY	CYN	CBL	CAF	CAB	Q.	œ	L/0
1.959	-10,460	.69360	03210	.12870	.01446	.01360	.04970	.02750	.62150	.51190	1.99220
1.959	-8,440	.70830	-,03730	,10060	.01180	.01120	.04800	.02810	.63560	.31630	2.00930
1.959	-6,300	.72470	04170	.06940	.00950	.00910	.04740	.02850	.65070	.32230	2.01860
1,959	~4.180	.73210	04110	,03690	.00730	.00690	.04710	.02820	.65760	.32530	2,02160
1.959	-2,040	.73470	~.03910	,00720	.00470	.00410	.04820	.02700	.65950	.32730	2.01490
1.859	.050	.74070	03770	01740	.00200	.00000	.04850	.02630	.66480	.33020	2.01300
1.959	2.160	.74160	~.03760	~.04090	00140	00320	.04740	.02670	.66688	.32960	2,02040
1.959	4.250	.74290	03760	06510	,00440	00620	.04690	.02720	.66750	.32960	2.02490
1.959	6,410	.74350	~.03850	09530	~.00740	00960	.04590	.02850	.66830	.32890	2.03170
1.959	8,520	.74550	03660	12710	00990	01220	.04670	.02850	.66980	.33050	2.02670
1.959	10,540	.75950	03280	15540	01320	-,01440	.04800	.02720	.66390	.32940	2.01540
1.959	.040	.73650	03670	01790	.00190	.00040	.04770	.02660	.66130	,32770	2,01750
	4545454	55492	88848								

MSSS (FAS) HAR ATP GRB (B1C1D1F1H1) (ME1) (VIKIRI)

(R76313) (03 NOV 72)

N. C.	EXENCE	DATA

PARAMETRIC DATA

									PARAMETRI	LUAIA	
SHEF .	7,4190 80	.th. 104RF	* 3,4	550 IN.				ALPHA =	20,000	CONFIG =	3.000
LREF =	2.1020 IH	. YMRF	.0	000 IN.				RUDDER =	.000	RUDFLR =	10.000
BREF =	4.0300 IN	. ZHRF	٥. • •	000 IN.				ELEVIR =	-20.000	CBDELV =	-20.000
SCALE =	.0040			•				IBDELY =	-20,000	AILRON =	.000
						4		CBDATL =	.000	IBDAIL =	.000
									,,,,,	100411	
		RUN	NO. 120/ 0	RN/L =	4,13 GR	שופאד ואדפו	RVAL = -5.0	0/ 5.00			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	Ф	L/0
0.090	-10,150	.53910	01710	.10800	.01350	08600.	.05230	.01430	.48250	.24610	1,96020
2.990	-6,200	.54570	02020	.08270	.01140	.00750	.05090	.01450	.48900	.24730	1,97720
2,990	-6,130	,55030	02110	.05840	.00940	.00510	,04960	.01450	,49360	.24780	1.99210
2.990	~4.000	.55520	02280	Desco.	,00640	.00310	.04680	.01440	.49860	.24890	2,00260
2.990	-2.030	.\$5750	-,02260	.00950	.00370	.00140	.04800	.01410	.50110	.24910	2.01150
2.990	.010	.55990	~.02090	-,00950	.00060	.00000	.04810	.01370	.50330	.25010	2,01200
2.990	2,060	.56410	+.02250	-,03170	-,00270	00140	.04800	.01380	,50710	.25160	2,01570
2.990	4.090	.56600	-,02280	05350	00580	00300	.04810	.01410	.50890	.25230	2,01680
2.990	6,200	,56640	+,02220	-,07650	-,00860	00500	.04840	.01420	.50910	.25280	2.01360
2.990	8.230	.56420	02020	10060	01110	00730	.05000	.01440	.50650	.25340	1.99810
8,990	10,180	.56110	-,01660	12520	01330	00990	.05150	.01420	.50310	.25370	1.98290
	GRADIENT	.00136	.00001	-,01047	~,00151	00073	-, 0 0007	00004	.00130	.80046	.00160
		RUN	NO, 119/ 0	RN/L =	4.69 GRA	DIENT INTER	VAL = -5.00)/ 5.0 0			
MACH	BETA	CN	CLM	CY	CYN	ŒL	CAF	CAB	CL.	69	L/D
4,959	-10,000	.43380	00910	.07340	.01400	.00870	.05320	.00250	.38540	.20590	1.87180
4.959	-8,100	.44000	00960	.05640	.01220	.00790	.05020	.00290	.39230	.20540	1.90970
4.959	-6,080	.44490	01270	.03720	.00ee0	.00640	.04780	.00320	.39780	.20500	1.94030
4.959	~4.030	.44960	01310	.01910	.00710	.00430	.04560	.00350	.40290	.20460	1.96920
4.959	-2.010	.45180	01110	.00600	.00420	.00240	.04490	.00350	.40530	.20470	1.97900
4,959	.000	.45440	01390	01190	.00110	.00020	.04450	.00350	.40780	.20530	1.98560
4.959	2,050	.45490	01270	02610	00250	00200	.04450	.00360	.40820	.20560	1.98570
4,959	4,050	.45900	01240	~.04030	-,00560	00590	.04550	.00370	.41170	.20800	1.97890
4.959	6,110	,45940	01230	05620	00840	-,00580	.04720	.00360	.41140	.20970	1.96200
4.959	8.110	.45570	01050	~.07310	01110	00790	.04850	.00400	.40750	.20950	1.94460
4,959	10,060	.45370	01170	09230	01370	~.00930	.05020	.00380	.40510	.21050	1.92460
	GRADIENT	.00108	-,00001	00746	00159	-,00103	00003	\$0000.	.00101	.00038	.00129

MSSS (FAS) HAR ATP ORB (BICIDIFINI) (WIEL) (VIKIRI)

(R76314) (03 NOV 72)

REFERENCE	

	REFEREN	CE DATA							PARAMETRIC	DATA	
BREF .	7,4190 80	.IN. WARP	= 3.453	IN.				BETA =	.000	CONFIG *	3.000
LREF #	2.1020 IN	. YHRP	* .000	IN.				RUDDER =	.000	RUDFLR *	10.000
BREF =	4,0300 IN	. ZVRP	= 0000	IN.				ELEVTR =	-40.000	OBDELY =	-40.000
SCALE -	.0040							IBDELV =	-40.000	AILRON =	.000
								OBDAIL =	.000	IBDAIL =	.000
		•									•
		RUN NO). 100/ O	RN/L =	7.15 GR/	WIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLH	CY	6 144				_	_	
				-	CYN	CBL	CAF	CAB	CL.	9	L/D
1,961	.370	22910	.11920	.02460	00370	00100	.16630	.02300	23020	.16470	-8.39700
1.061	2,440	15070	.10860	.02310	-,00420	~.00150	.16180	.02230	15750	.15530	-1.01400
1,961	4.660	05640	.08880	.01960	00340	~.00230	.14710	.02240	06820	.14210	48000
1,961	6,860	.02990	.07270	.01500	00260	00240	.13460	.02300	.02350	.13840	.16990
1,961	9,080	.12590	.06000	.01470	00250	00240	.12460	.02400	.10470	.14300	.73230
1,961	11,260	.21500	.04710	.01250	~,00200	00250	.11610	.02470	.18810	.15600	1.20580
1.961	15.510	.30490	.03490	.01140	00180	00200	.10610	.02570	.27160	.17450	1.55680
1.961	15.700	,39060	.02450	00900.	00170	00150	.09750	.02580	.34960	.19960	1.75130
1,961	17,940	.47420	.01550	.00510	00160	-,00140	.08740	.02620	.42420	.22930	1,84960
1.961	20,140	.55800	.00930	.00120	~.00110	-,00130	.07920	.02620	.49660	.26650	1.86330
1.961	22,260	.63670	.00220 -	.00260	00030	00090	.07330	.02720	.56330	.30980	1.61610
1,961	11,290	.22190	.04670	.01220	00190	80240	.11350	.02500	.19540	.15460	1.26170
	GRADIENT	,04028	-,00711 -	.00117	.00007	00030	00450	00014	.03779	00528	.21408

.901

43,740

33,230

GRADIENT

1.32460

.02962

1.06250

.16600

.13250

.00197

.00320

-,03260

.00149

.00140

.00640

-.00070

-.00350

.00690

-.00046

.01500

.03770

-.00190

1.02120

1.41400

-.04318

.92680

.61380

.02889

.94640

.86800

.01528

.06790

.06670

.00050

MSSS (FAS): WAR ATP CRE (BICIDIFIMI) (WIEI) (VIRIRI)

(RT6315) (03 NOV 92 1

				(, 40), (60)	- OKO 1911	**************************************	ET) (ATETMI)	,	(R763:	15) (03)	OV 72 1
	REFERE	NCE DATA							PARAMETRI	DATA	
NEF =	7,4190 &		-	330 IN,				BETA =	.000	CONFIG =	3,000
LREF =	2,1020 [*		000 IN.				RUDDER =	.000	RUDFLR =	10,000
BREF .	4,0300 ti	N. ZHRP	.00	000 IN.				ELEVTR =	-40,000	CRDELY =	~40.000
SCALE =	.0040							18DELY =	-40,000	ATLRON =	.000
							•	OBDAIL =	.000	IBDAIL =	.000
		RUN NO.	. 191/ 0	RN/L =	4.95 GRA	DIENT INTER	VAL = -5.0	00, 5,00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	6	L/D
.593	21,760	.91100	.15810	01290	.00060	.00210	.06340	.04620	.45100	.24850	1.81490
.893	23.760	.59860	.14690	02100	.00510	.09410	.05060	.04490	.52730	.28760	1.83340
.595	25.640	.66560	.12860	05250	00840	.00490	.03420	.04570	.60210	.32970	1.82600
.593	27,930	.76350	.10830	01990	.01010	.00230	.01700	.05090	.66650	.37270	1.78610
.595	29,990	,83650	.09960	01940	.01300	00150	.00680	.05820	.72100	.42410	1.70000
.993	32,040	.86810	.11010	02470	.01010	00510	.02050	.05580	.72490	.47600	1.51620
.593	34,110	91550	.12420	-,02400	.00930	00070	.03200	.05840	.74000	.53990	1.37030
.893	36,160	.97520	.13690	-,02160	.00430	.00180	.03410	.06210	.76710	.60300	1.27210
.593	38,280	1,03150	.14750	-,01930	.00260	.00120	.03030	.06350	.79090	.66290	1,19310
.693	40,320	1.06750	.15290	02230	.00280	.00050	.02640	.06430	.81200	.72390	1.12150
.893	42,320	1.14320	.15670	02460	.00370	00030	.02020	.06570	.83160	.78470	1.05960
.593	32,040	.86680	.11210	082860	.01080	-,00460	.01960	.05670	.72430	.47660	1.51950
	GRADIENT	.02934	.00066	00028	00012	00017	00117	.00111	.01687	.02646	04359
		RUN NO.	190/ 0	RN/L =	6,29 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	6	L/D
.901	22.640	.68300	.14530	-,02260	.00730	.00550	.06470	.05910	.60550	,32270	1.87610
.961	24.650	.76430	.13520	01660	.00890	.00410	.05390	.06030	.67210	.36760	1.82690
.901	26.780	.64920	.12360	-,01860	.01150	.00110	.04330	.06290	.73860	.42130	1.75300
.901	28,970	.93650	.11270	02410	.01150	oe000.	.05690	.06440	.80300	.48700	1,64890
.901	31,120	1,00460	.12160	03500	.01010	.00600	.03810	.06530	.84020	.55200	1.52210
.901	33.250	1,06450	.13270	03100	.00590	.00690	.03800	.06710	.86930	.61550	1.41230
.901	35,360	1,11550	.14520	01790	00170	.00250	.03940	.06860	.88680	.67780	1.30820
.901	37,430	1,15650	.15960	00370	00650	00510	.03620	.07020	.89620	.73180	1.22450
.901	39.620	1,21780	.16250	.00520	00550	00560	.02580	.97040	.92150	.79650	1.15690
.901	41.690	1.27630	.16320	.00380	00120	00500	.01820	.06890	.94080	.86260	1.09070
.901	43.740	1.37460	. 16600	ひりょうり	BD14D	- 00360	04 = 00				

4,959

4.959

4.959

4.959

4.959

31,560

33,630

35,690

37.760

39,820

41.790

GRADIENT

.75210

.83190

.90690

.98390

1.05760

1.12820

.03565

.00020

~.00070

-.00380

-.00920

-.01110

-.01330

-.00131

-.01450

-.01470

-.01760

-.02170

-.02470

-.02618

-,00100

.00130

.00150

.00190

.00190

01200.

.00210

.00008

.00130

.00130

,00130

.00130

.00140

.00220

.00007

.05690

.05610

.05520

.05300

.05120

.04930

-.00068

1 03 NOV 72 1

(R76315)

.61090

.66160

.70440

.74560

.77940

.80820

.02257

.44230

.50750

.57400

.64480

.71670

.78880

,02871

1.38130

1.30540

1.22710

1.15540

1.08750

1.02460

-.03494

.00350

.00350

.00346

.00340

.00350

.00360

.00001

MSSS (FAS) NAR ATP ORB (BICIDIFINI) (MIEI) (VIKIRI)

	REFERENC	E DATA							PARAMETRIC	DATA	
WEF :	7.4190 80		* 3.4	530 IN.				BETA =	. aoo.	CONFIG =	3.000
LREP H	2.1020 IN.		* ,0	000 IN.				RUDDER =	.000	RUDFLR =	10,000
BREF =	4,0300 IN	. ZHRP	.0	000 IN.				ELEVTR =	-40,000	OBDELY =	-40.000
SCALE =	.0040	*						1BOELY =	-40,000	ATLRON =	.000
								OBDAIL =	000	IBDAIL =	.000
		RUN	NO. 125/ 0	RN/L =	4,12 GRA	DIENT INTER	IVAL = -5.0	90/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	œ	L/D
2.990	21,740	.49250	.00910	00350	.00070	00150	.07360	.01340	.43020	.25080	1,71490
2.990	23,710	.56180	.90649	-,00460	.00130	00120	.07030	.01350	.48610	.29030	1.67420
2,990	25,630	.63890	.00330	-,00710	.00170	00090	.06640	.01360	.54610	.33820	1.61440
2.990	27.930	.71360	00140	00990	.00220	00080	.06210	.01380	.60130	.38910	1,54530
Dee. \$	30.030	.79060	00290	01120	.00210	00010	.05850	.01400	,65520	.44630	1,46780
2.090	32,130	.86970	00660	01050	.00070	.00120	.05490	.01400	.70720	.50920	1,36880
2.990	34.260	.95260	00900	01110	00000.	.00230	.05130	.01380	.75830	.57870	1.31020
2.990	36.340	1.03080	-,01090	01240	00050	.00310	.04860	.01360	.85140	.65010	1.23250
2.990	36,490	1,11440	01180	01910	.00160	.00210	.04520	,01360	.84400	.72910	1.15750
2.990	40,570	1,18920	01390	02420	.00260	.00200	.04300	.01350	.87520	.60620	1.08550
2.990	42.590	1.26140	01150	02640	.00320	.00160	.04110	.01360	.90070	.68410	1.01670
	GRADIENT	.03718	00110	00101	.00004	.00021	00160	.00000	.02300	.03059	03464
		RUN I	40. 126/ O	RN/L =	4.84 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	ON.	CLM	CY	CYN	CBL	CAF	CAB	a.	Ф	L/0
4.959	21.400	.40720	.01280	00520	.00110	.00040	06450	.00320	.35550	.20870	1,70360
4.959	23.330	.47040	.01050	00770	00000.	.00030	.06220	.00340	.40730	.24340	1,67320
4.959	25,400	.53710	.00820	01000	:00140	.00040	.06040	.00340	.45920	,28490	1.61150
4.959	27,450	.60770	.00650	01036	00000.	.00110	.05940	.00350	.51180	.33300	1.55710
4.959	29.510	.67950	.00560	01160	.00120	.00140	.05810	.00350	.56270	.38530	1.46030
4 959	34 men	76940	66566	=4.4==							

MSSS (FAS) MAR ATP CRB (BECEDIFINE) (MEE) (VIKERE)

(R76316) (03 HOV 72)

									• • • • •		
	REFERE						PARAMETRIC	DATA			
sker =	7.4190 8		P # 3.4	30 IN.				BETA =	.000	CONFIG =	3.000
LREF .	2.1020 (1	H. YMR	P = .00	000 IN.				RUDDER =	.900	RUDFLR =	10,000
BREF =	4,0300 [1	N. ZMR	P * .04	000 IN.				ELEVTR =	-40.000	CEDELY =	-40,000
SCALE =	.0040							IBDELV =	-40,000	AILRON =	.000
								CEDAIL =	.000	IBDAIL =	.000
		RUN	NO. 196/ 0	RN/L =	4.16 GR/	ופותו זאפוט	RVAL = -5.	00/ 5.00			
MACH	ALPHA	64	CLM .	CY	CYN	CBL	CAF	CAB	CL.	co	L/D
2.990	42.020	1.22140	00s90	.00500	00120	00110	.04130	.01180	.87960	,84840	1,03670
2.990	43,960	1,28950	00030	.00650	00160	00130	.04060	.01190	.89990	.92450	.97340
2.990	46.020	1,35570	-,00540	.00700	00150	00160	.03990	.01210	.91250	1,00340	.90930
2.990	46,100	1.41650	-,00060	.00650	00160	-,00220	.03900	.01230	.91670	1,08050	.84840
2.590	50,160	1.47140	.00630	.00820	00180	00200	.03800	.01250	.91330	1,15420	.79120
2,990	52.210	1,52020	.01310	.00980	00190	00250	.03650	.01250	.90250	1.22390	.73740
2,990	54.260	1,56250	.02020	.00990	~.00170	00240	.03450	.01260	.88460	1.28650	.68650
2.990	56,260	1.59930	.02510	.00910	00190	00250	.03130	.01260	.86170	1,34760	,63940
2.990	50,550	1.63560	.02830	,00e00	00220	00250	,02710	.01250	.83490	1.40660	.59350
2,990	60.370	1.67410	.03040	.01030	00200	00250	.02160	.01220	.80870	1,46590	.55160
2,990	62,320	1.70800	.02050	oeea o.	-,00210	00260	.01610	.01190	.77910	1.52000	.51250
	GRADIENT	.02346	.00226	.00023	00004	00007	-,00115	.00002	00551	.03296	-,02573
		RUN	NO. 195/ 0	RN/L =	4,90 GRA	DIENT INTER	WAL = -5.0	00/ 5.00			
MACH	ALPHA	ON .	CLM	CY	CYN	CBL	CAF	CAB	CL.	69	L/0
4,959	41,520	1,11030	01420	.00730	00140	+.00110	.05010	.00230	.79800	.77360	1,03160
4,959	43,440	1.18350	01430	.00830	00120	00140	.04910	,00250	.82550	.84940	.97180
4,959	45,470	1,25490	01640	.00920	00150	00130	.04770	.00260	.84580	.92620	.91120
4,959	47,550	1,32560	01690	.01020	00160	00160	.04650	.00260	.86070	1.00930	.65270
4,959	49.560	1.39000	-,01830	.00890	00190	00200	.04460	.00256	.86740	1.08700	.79800
4,959	51.600	1,44630	01500	.00880	00180	00240	.04370	.00240	.86530	1,16220	.74450
4.959	53,630	1.50230	-,00960	.01030	00200	00240	.04230	.00210	.85670	1.23490	.69370
4.959	95,640	1,55000	00460	.01180	00180	-,00200	.04070	.00180	.84110	1.30250	.64570
4.959	57.700	1,59220	.00140	.01170	00190	00210	.03800	.00160	.81840	1.36630	.59890
4.959	59,710	1.62780	.00590	.01150	00160	~.00200	.03490	.00130	.79090	1.42320	.55570
4.959	61,640	1,66160	.00740	.01090	00200	00220	.02990	.00000	.76270	1,47650	.51650
	GRADIENT	.02743	.00124	.00019	00003	00005	00090	00008	00200	.03530	02558

GRADIENT

.39260

.05459

.05600

-.00754

.01510

-,00153

-.00270

.00025

.00200

.00012

.03270

-.00334

.03000

-.00020

.37830

.05369

.10990

-.00307

3.44120

.80363

MSFC TWT 555

B400 00

MSSS (FAS) HAR ATP ORB (BICIDIFINE) (WIEE) (VIKERE)

(R76317) (03 NOV 72)

									PARAMETRIC	DATA	
SREF =	7,4190 80.		= 3.45	30 IN.				GETA =	.000	CONFIG =	3,000
LREF .	2,1020 IN.	, YMRP	= ,0 0	00 IN.	•			RUDDER =	.000	RUDFLR =	10.000
BREF =	4.0300 IN	, ZMRP	× .00	00 IN.				ELEVTR =	.000	OBDELA =	~80.000
SCALE =	.0048							180ELV =	.000	ATLRON =	.000
						•		CBDAIL =	.000	IBOAIL =	.000
		RUN N	0. 37/ 0	RN/L =	4.99 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	00	L/D
.598	.550	22660	.12360	.03140	00470	.00000	.04730	.02550	22720	,04510	-5,03660
.506	2,540	13560	,11440	.02960	00400	.00130	.04650	.02480	-,13750	,04040	-3.40010
.696	4.660	03830	.10710	.02840	00380	.00130	.04240	.02460	-,04160	.03910	-1.06500
.596	6.760	.05990	.09720	.02480	00530	.00100	.03550	.02370	.05530	.04230	1,30700
.598	8,680	.17500	.08420	.02280	00310	.00070	.02790	.02440	.16660	.05420	3,06990
.596	10,990	.28900	.06970	.02140	00290	.00170	.02020	.02610	.27980	.07500	3,73170
.596	13,100	.39600	.05990	.02000	00260	.00220	.01440	.02670	.38240	.10380	3,68100
.598	15.210	.50060	.04870	.01610	00260	.00310	.00640	.02970	.48080	.13950	3.44590
. 596	17.360	05909.	.03590	.01350	00310	.00340	.00360	.03310	.57750	,18440	3,15170
.598	19,440	.70410	.03140	.01460	00420	.00230	00250	.04020	.66470	.23200	2.86480
.598	21,410	.76570	.03350	.01100	00350	.00050	00460	.04560	.71450	.27520	2,59590
.598	11,000	.29420	,07130	.02210	-,00310	.00000	.02050	.02560	.28490	.07630	3,73000
	GRADIENT	.04586	~.00401	00073	.00022	.00012	00120	00022	.04516	00145	.96780
		MUN N	D. 38/ G	RN/L ≖	6.28 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	a_	69	L/O
696	.460	24370	.14760	.03370	00540	00070	. 06 8 00 .	.02980	24430	.06600	-3,70130
.698	2.550	13060	.13030	.03110	00470	-,00040	De SaO.	.02850	-,13330	.05700	-2.33630
.498	4.760	00790	.11500	.02710	00430	00020	.05360	.02890	01240	.05270	23550
.,898	7.010	.13610	.08910	.02330	80370	.00000	.04400	.02850	.12970	.06030	2,15110
.898	9.240	.27000	06890	.01850	-,00310	,00110	.03890	.02870	.26030	.03180	3,18100
. 898	11,440	.39300	.05530	.01370	00210	.00260	.05500	.03080	.37870	,11040	5,42810
.896	13,660	.50600	.04510	.00900	00170	.00430	.03260	.03340	.46390	.15130	3,19840
. 896	15.820	.58810	.04770	.00260	00110	.00420	.03430	.04070	.55650	.19340	2.87730
. 595	18,010	.67270	,04850	.00500	00400	.00070	.03450	.04460	.62910	.24090	2,61050
.898	20.150	.74220	.06050	.01290	00320	-,00840	.03530	.05370	.68450	.28890	2.36940
.698	22,130	.78700	.06830	.00550	00130	-,00390	.03240	.05790	.71680	.32660	2.19470
	44 446	70000	000			25055					

MSSS (FAS) HAR ATP ORB (BICIDIFINI) (WIEI) (VIKIRI)

(R76317) (G3 NOV 72)

	REFEREN	KE BATA							PARAMETRIC	DATA	
LREP =	7.4190 80	I, IN. WARP	3,4	530 IN.				BETA =	.000	CONFIG =	3.000
REF =	41 020 LS	i. YMRP	.0	000 IN.				RUDDER =	.000	RUDFLR =	10,000
SRED" =	4.0500 th	i. ZHRP	.0	000 IN.				ELEVIR =	.000	OBDELY #	-20,000
KALE =	.0040							(BOELV =	.000	ATLEON #	.000
								CEDAIL =	.000	IBDAIL #	.600
		RUN	NO. 39/ 0	RNUL =	6.70 GR	DIENT INTER	RVAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	α.	œ	L/D
1,205	.630	13810	.12940	.02750	00470	.000030	.09230	,04120	13910	080e 0.	-1.53210
1.203	2.770	-,00730	.09760	.02420	00360	.00060	.08820	,04160	-,01160	.08780	13230
1,203	5,040	.15830	.06270	.02140	~.00320	.00050	.08020	.04400	.13070	.09210	1,41850
1,203	7,540	.27920	.02560	.01630	-,00200	,00040	.07110	.04730	.26780	.10620	2,52140
1,203	9,590	.42280	00400	.01430	00180	-,00030	.06850	.04480	.40550	.13800	2.93680
1.203	11,860	.55610	-,02890	.00640	-,00010	.00020	08880.	.04490	.53050	.17970	2.95090
1,203	14.130	.67990	-,04560	.00160	.00020	.00030	.06570	,04860	,64320	.22980	2.79910
1.203	16.360	.79530	-,06150	00190	.00120	.00190	.06520	.05040	.74470	.28660	2,59830
EDS. t	18.620	,89060	06070	00340	.00000	.00150	.06490	,05710	.82320	.34600	2.37920
1,203	20,610	01086,	06390	-,00470	~.00100	.00010	.06100	.05750	.69440	.40530	2.20650
1,203	22.680	1.03530	05760	00890	.00000	.00110	.05750	.05930	.93150	.45560	2.04440
1,203	11,860	.55940	02920	.00700	00030	.00000	.06680	.04480	.53370	.16050	2,95660
	GRADIENT	.06112	01477	00154	.00042	.00023	00192	.00019	.05958	00140	.65411
		RUN	NO. 103/ 0	RN/L =	7,15 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	ON .	CT'M	CY	CYN	CBL.	CAF	CAB	αr .	Ф	L/D
1,963	.680.	03660	.03230	.01650	00140	00010	.08170	.02350	~,03750	.08130	46220
1,963	2.730	.04150	.01820	.01690	00000	00050	.07870	,02450	.03770	.08060	.46840
1,963	4.940	.12770	.00360	.01470	08060	00090	.07710	.02280	.12060	.08790	1.37230
1,963	7.150	.20930	00960	.01210	.00010	-,00070	.07270	.02540	.19860	.09820	2.02260
1.963	9,310	.26890	02300	.01010	.00060	00060	.07060	.02540	.27370	.11650	2.34910
1,963	11.490	.36670	03400	.00810	.00100	00050	.06830	.02520	.34570	.14000	2.46920
1.963	13.670	.44370	-,04300	.00610	.00130	~.00020	.06600	.02540	.41550	.16900	2,45810
1.963	15.890	.52590	05290	.00420	.00100	.00010	.06290	.02630	.48850	.20460	2.38760
1,963	18.070	.59050	05280	.00130	.00110	.00000	.05930	.02620	.54290	.23950	2.26660
1,963	20,250	.67070	-,05970	-,00230	.00170	.00140	.05550	.02660	.61000	.28430	2,14560
1.963	22,360	,74500	~.06540	00620	.00290	.00280	.05200	.02740	.66920	,33160	2.01800
1.963	11,460	.36340	05070	.00870	.00110	00050	.06810	.02520	.34250	.13910	2.46240
	GRADIENT	.03657	~.00674	00089	.00019	00019	00108	00017	.03712	.00157	.45035

4.959

4.959

4,959

4,959

12.750

14.790

16,880

18,900

20.690

GRADIENT

-.01350

-.01460

-.02040

-.02400

-.02750

-.00253

.26110

.32040

.37870

.44120

.02061

.00040

.00140

-.00260

-.00440

-.00560

-.00061

.00110

.00140

.00140

.00180

.00180

.00000

08000.

.00110

.00110

.90130

.00150

.00018

.05090

.04890

.04750

.04660

.04580

-.00194

.00360

.00370

.00370

.00370

.00380

.00010

.19100

.23990

.29280

.34320

.39580

.01950

.09540

.11400

.13850

.16680

.20010

-.00142

2.00100

2.10470

2,11400

2.05690

1.97780

.27954

MSSS (FAS) NAR ATP CRB (BICIDIFINI) (MIEI) (VIKIRI)

(R76517) (03 NOV 72)

-	REFEREN	KE DATA							PARAMETRIC	DATA	
SARF .	7,4190 50		z 3,4	1930 IN.				BETA =	.000	CONFIG =	3,000
LREP =	2.1020 IN		• .0	0000 IN.				RUDDER =	.000	RUDFLR =	10.000
BREF #	4,0300 IN	i. ZHRP	· = .0	1000 th.				ELEVTR =	.000	OBDELV =	-20.000
BCALE *	.0040							IBDELY =	.000	ATLRON =	.000
								CBOATL =	.000	180AIL =	.000
		RUN	NO. 121/ 0	RN/L =	4.13 GR	ADIENT INTER	RVAL = -5.0	0/ 5.00			
MACH .	ALPHA	CN CN	CLM	CY	CYN	CBL,	CAF	CAB	G.	G	L/D
2.990	.650	04470	.00940	.01080	.00020	-,00150	.07650	.01240	04560	.07600	60000
2.990	2.590	.00660	,00460	.00970	.00020	00140	.07410	.01280	.00320	,07440	.04410
2,990	4.620	.06020	.00000	.00950	.00840	-,00110	.07150	.01310	.05420	.07618	,71220
2.990	4,770	.11920	00550	.00810	.00070	-,00060	.06910	.01310	.11030	.08270	1,33370
2,990	8,820	.17660	00880	.00630	.00060	00070	.06610	.01320	.16430	.09240	1,77710
8.990	10,900	.23600	-,01350	.90520	.00060	00050	.06330	.01330	.21980	.10680	2.05770
2.990	13,000	.30010	01600	.00410	.00070	.00000	.06070	.01330	.27880	.12670	2.20000
2,690	15,060	.36350	02230	.00260	00000.	.00020	.05810	.01330	.33590	.15060	2.23040
2,990	17.190	.43460	02860	.00050	.00130	.00040	.05620	.01320	.39880	.18220	2.18810
2.996	19.260	.50540	03430	00550	.00200	.00020	.05360	.01340	.45940	.21740	2.11340
2.990	21,260	.57600	04040	00360	.00220	.00030	.05140	.01360	.51810	.25680	2.01710
	GRADIENT	.02642	-,00216	00038	.00005	.00010	00126	.00018	.02514	.00003	.33052
		RUN 1	10, 122/ 0	RN/L =	4.86 GR	LDIENT INTER	VAL = -5.00	0/ 5.00			
MACH	ALPHA	CN CN	CLM	CY	CYN	CBL	CAF	CAB	a.	c 0	L./D
4.959	.650	~.06410	.00840	.00788	.00030	00120	.07160	.00300	06490	.07090	
4.959	2,560	02590	.00390	.00660	.00020	00080	.06670	.00320	02880	.06550	91610
4.959	4.610	.01750	-,00160	.00540	.00050	00050	.06390	.00340	.01230	.06520	44070
4.959	6,640	.06030	00270	.00470	.00096	.00010	.06080	.00350	.05280		.18950
4,959	6,680	.10760	00550	.00400	.00130	.00020	.05650	.00350	.09780	.08740	.78420
4,959	10,710	.15670	-,00880	.00260	.00120	.00050	.05350	.00360	.14400	.07210	1.35560
4.959	12.750	20740	- 01360	SDO40	00140	00000		•00000	.14400	.08170	1.76270

53,350

GRADIENT

1.20900

.03461

.04490

-.00086

-.04510

e8000.

.00980

-.00010

.01230

-.00009

1.49810

-.04911

.67120

.03299

MSSS (FAS) MAR ATP ORB (BICIDIPINE) (WIEE) (VIKERE)

(R76318) (03 NOV 22)

					MIT ONE IDI	CIDIT INI) (M	TETS (ATKAKA)	l	(R763)	18) (02)	HOW TR)
	REFERE	HCE BATA							PARAMETRI	C DATA	
SREP &	7,4190 \$6			1530 IN.				BETA =	.000	COFIG =	3.000
LREF	2.1020 11		•	3000 IN.				RUDDER =	.000	RUDFLR =	10,000
BREF =	4.0300 11	N. ZMR), *	0000 IN.				ELEVTR =	.000	OBDELY =	-20,000
SCALE =	.9040							IBDELY =	.000	AILRON =	.000
								CBOATL =	.000	IBDAIL =	.000
		RUN	NO. 36/ 1	RN/L =	4.97 GR	WIENT INTER	RVAL = -5.0	00, 5,00	•		
MACH	ALPHA	CN	CLH	CY	CYN	CBL	CAF	CAB	CL	69	L/D
.594	21.950	.77410	.03520	00820	.00150	00100	00380	.04420	.71940	.28580	2.51700
,594	23.860	.80260	.03660	00860	.00320	00140	00750	.04640	.73710	.31620	2.31650
.594	25.950	.05230	.03400	~.00560	.00130	-,00140	~.00860	.05040	.77010	,36520	2,10840
.594	26,010	.90420	.03060	.00860	00070	00760	01060	.05810	.80330	,41520	1.93430
,894	30,070	.97510	.02100	.01070	.00780	-,01460	01280	.06290	.85020	.47750	1,78050
.594	32,140	1.04990	.01260	00720	.01230	~.01000	01790	.06540	.89840	,54340	1.65310
.594	34.220	1.12010	.01260	01750	.00830	00150	02120	.06830	.93800	.61240	1.53160
,594	36.310	1,19030	.01710	01790	.00590	.00180	~.02700	.06920	.97510	.68310	1,42730
.594	38,420	1.25110	.01710	01720	.00000	.00060	03570	.07240	1.00230	.74950	1,33720
.594 .894	40,460	1.31350	.01670	-,01440	.00590	00150	04130	.07510	1,02610	.82100	1,24970
.594	42.430	1.36050	.01460	-,01120	.00650	00300	-,04950	.07540	1,05230	.89490	1,17570
.0.44	32.160 GRADIENT	1.04940	.01230	-,01030	.01180	-,00910	01780	.06510	.89780	.54360	1,65150
	WADLEN	.03061	00118	00068	.00028	,00013	00214	.00153	01741	.03033	~,06410
		RUN	NO. 35/ 0	RN/L ≈	6.29 GRA	DIENT INTER	VAL = -5,0	0/ 5,00			
MACH	ALPHA	CN	QLM	CY	CYN	CBL	CAF	CAB	α.	6	L/0
.901	22,690	.79200	.06910	.00070	.00080	00410	.03080	.05760	.71880	.33400	2,15180
.901	24,730	.86020	.06710	ae000	.00180	00270	.02700	.06090	.76990	.38450	2.00250
.901	26.870	.94330	.05670	-,00130	.00380	0030 0	.02420	.06280	.63050	.44800	1.85370
.901	29,080	1.05450	.04440	01630	.00750	.00070	.02250	.06400	.91060	,53230	1,71050
.001	31,230	1.13470	.04500	03420	.01020	.00870	.01580	.06620	.96190	.60200	1,59770
.901	33,360	1,21190	.04260	04190	.00900	.01230	.00950	.06770	1.00690	.67450	1,49270
.901	35.510	1,28140	.04210	03630	.00600	.01120	00050	.07110	1.04330	.74390	1,40240
.901	37.610	1.32650	.05290	.00570	00110	00120	01260	.07520	1,06010	.80080	1.32370
,901	39,770	1,59580	.05050	.02290	.00010	00660	01980	.07510	1.08530	.87780	1.23630
.961	41.900	1.46650	.04660	.01420	.00190	00500	02710	.07460	1,10950	.95930	1,15660
.901	43,900	1.52090	.04600	.00760	.00270	00410	03470	.07280	1,11990	1.02960	1.08760

.00760

-.00325

.06780

.00083

1,00550

4,959

4,959

39,620

41,840

GRADIENT

1.07840

1.15640

1.23940

.03849

-.07816

-.08770

-.09720

-.00358

-.02310

-.02710

-.02890

-.00116

.00550

.00360

.00370

.00007

.00270

.00250

.00270

.00008

.04260

,04100

.04030

-.00021

.00340

.00530

.00330

-.00001

.62580

.86180

.89630

.02420

1.18840

1.11590

1.04600

-.04508

.77220

.85690

			M\$55	(FAS) NAR	ATP ORB (B1C	101F1H1) (W	E1) (VIKIRI)		(R7631	(6) (53)	(ST VO
	REFEREN	KE DATA			-				PARAMETRIC	: DATA	
we .	7,4190 80	.1N. 10-RF	* 3.4	530 IN.				BETA =	.000	CONFIG =	3,000
LREF #	\$.1020 IH	. YHRE	. •	1000 IN.				RUDDER =	.000	RUDFLR =	10,000
enep 4	4.0300 IN	. ZHRF		000 IN.				ELEVIR =	,000	OBDELY =	-20.000
SCALE =	,0040	•						TODELY =	.000	AILRON =	.000
								CEDAIL =	.000	TBOATL =	.000
		RUN	NO. 124/ 0	RN/L =	4.12 GRA	DIENT INTER	VAL = -5.0	90, 5,00			
MACH	ALPHA	CN	CUM	CY	CYN	CBL	CAF	CAB	CL.	c o	L/0
2.990	21.760	.57070	04120	~,00490	.00240	.00000	,04940	.01390	.51150	.25780	1,98440
2.990	23,770	.64120	04760	00770	.00270	.00020	.04690	.01400	.56780	.30140	1.88350
2.990	25,670	.71970	05480	~.01050	.00350	.00040	.04470	,01410	.62800	.35430	1.77240
2.990	27,970	,60050	06200	01300	.00420	.00060	.04330	.01420	.68660	.41370	1.65950
2.990	30,080	.66500	06870	01410	.00400	.00110	.04090	.01410	.74530	.47890	1.55600
2.990	32,160	.96650	07520	01410	.90270	.00270	.03880	.01410	.79730	.54760	1,45590
2,990	54,310	1.05590	08260	01370	.00140	.00400	.03710	.01410	.85120	.62590	1.35990
2,990	36.390	1.14050	08970	01660	.00140	.00450	.03560	.01410	.89680	.70550	1.27110
2,990	38,940	1,22890	09660	-,02290	.00320	.00360	.03380	.01400	.93990	.79230	1.18630
2.990	40,630	1,31310	10370	-,02850	.00430	.00280	.03200	.01360	.97560	.87940	1,10930
2.99G	42.630	1.39100	10920	05170	.00490	.00230	.05070	.01370	1,00250	96470	1.05910
	GRADIENT	.03973	-,00329	00113	.00004	.00018	00089	-,00001	.02404	.03420	04573
		RUN	NO, 123/ 0	RN/L =	4.86 GRAI	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	ON	CLM	CY	CYN	CBL,	CAF	CAB	Q.	œ	L/D
4.959	21,410	.45760	02500	00560	.00210	.00130	.04560	.00340	.40930	.20960	1.95300
4,959	25,360	.52430	-,03010	00800	.00230	.00110	.04410	.00350	.46380	.24840	1.86670
4.959	25.420	.89760	03300	00980	.00260	.00140	.04460	.00360	.52060	.29680	1.75360
4,959	27,490	.67110	05860	01060	.00230	.00190	.04410	.00370	.57500	.34900	1.64740
4.959	29.530	,74740	-,04550	01300	.00220	.00250	.04390	.00370	.62860	.40660	1.54590
4.959	\$1.590	.82920	05270	01540	.00250	.00250	.04578	.00360	.68340	.47160	4.44890
4.959	33.670	.91270	06300	01940	.00270	.00250	.04330	.00360	.73550	.54210	1.35670
4.959	35,710	.99320	07050	02180	.00260	.00270	.04320	.00350	,78120	.61480	1.27050

11,550

GRADIENT

.900

.50220

.05430

~.00390

-.00640

-.01290

-.00124

.00550

.00012

.04170

.00091

.04900

-.00117

.03360

.00012

.46220

.05320

.14860

\$1200.

3,24470

.83196

MSSS (FAS) HAR ATP ORB (BICIDIFINI) (WIEI) (VIKIRE)

(RT6319) (03 NOV T2)

											~ ' ' '
:	REFERENC	E DATA							PARAMETRIC	DATA	
SREF =	7,4190 50,			1530 IN.				BETA #	.000	CONFIG E	3.000
UREF :	2,1020 [N,			1000 IN.				RUDDER =	.000	RUDFLR =	10,000
	4,0300 IN.	, ZHRP		1000 tH.		•		ELEVTR =	.000	OBDELY =	.000
SCALE .	.9040							IBOELV =	.000	AILRON =	10.000
								OBDAIL =	10.000	IBDAIL =	10.000
		RUN	NO. 182/ (RN/L =	4,96 GRA	DIENT INTE	RVAL * -5.0	00, 2,00			
MACH	ALPHA	ON.	CLM	CY	CYN	CBL	CAF	CAB	, CL	69	L/0
.896	.670	03350	.02910	-,01420	.00760	.04790	.04340	.02380	03410	.04300	79290
.996	2,460	.05770	.02160	01790	.00890	.04870	.04290	,02240	,05570	.04550	1.22210
.996	4,760	.15320	.01590	02300	.01040	.05050	.03720	.02400	.14960	.04980	3,00200
.596	6,690	.25710	.00510	02760	.01040	.05250	.03200	.02240	.25140	.06260	4,01170
.996	9.000	.36090	-,00190	02460	.00870	.05000	.02680	.02390	.35220	.08290	4,24700
.596	11,090	.44540	~.00870	02290	.00700	.04540	.02370	,02540	.43250	.10900	3,96740
.596	13,190	.54940	01910	-,02140	.00580	.04220	.02070	.02750	.53020	.14550	3,64240
.596	15,260	.63270	02010	-,01900	.00360	.03000	.01920	.02970	.60530	.18510	3.26680
.596	17,400	.72490	De050	01480	.00150	.03500	.01780	.03350	.68630	.23390	2,93420
.596	19,460	.79450	~.01860	00870	-,00100	.03070	.01450	.04020	.74410	.27830	2.67300
.596	21,470	,8469D	01320	08000.	00220	.02150	.01250	.04770	.78350	.32170	2,43540
.595	11,100	.45360	01,020	02220	.00690	.04430	.02390	.02530	.44050	.11080	3.97460
	GRADIENT	.04565	00322	-,00215	.00064	.00064	00153	.00006	.04491	.00167	.92711
		RUN	NO. 183/ 0	RN/L =	6.28 GRAI	DIENT INTER	RVAL = -5.0	0/ 5,00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	0	L/D
.900	.620	07700	.05370	00680	.00780	.03870	.05900	.02950	-,07760	.05820	-1,33340
.000	2.710	.03250	.04120	00870	.00820	.04030	.05920	.02990	.02970	.06070	.48960
.906	4,920	.15640	.02620	01210	.00830	.04260	.05400	.03000	.15110	.06730	2.24560
.900	7.170	.26910	.00900	01670	.00840	.04500	.05010	.02970	.28060	.08580	3.26810
.900	9.350	.39120	.00440	01470	.00720	.04230	.04920	.03190	.37800	.11220	3,36820
.000	11,540	.49730	00300	~.01480	.00590	.04220	.04880	.03300	.47740	.14730	3.23950
. 9 00	13,760	.61340	-,01120	01550	.00500	.04310	.05010	.03750	.56360	.19460	2.9994 0
000,	15,920	,70750	01660	01320	.00260	.04140	.05030	.04090	.66650	.24250	2.74760
.000	18,130	.76100	~.00500	.00030	00220	.03160	.05100	.05020	.72630	.29160	2.49050
.000	20,210	.63630	.00850	.01000	00310	.02260	.04670	.05620	.76860	.33280	2.30910
.000	22,290	.90910	.00910	.02050	00540	.01950	.04200	.06010	.82520	.38370	2.15030
	14 650	ECOOC	- BOTAG	- 54000	00000	D	6.000	~			

.03870

-,00661

-.00082

-.00005

-.00019

-.00039

.00005

.03729

.00193

.45749

MS99 (FAS) NAR ATP ORB (BICIDIFINI) (MIEI) (VIKIRI)

(R76319) (03 NOV 72)

					:						
	REFERENC	E DATA	•						PARAMETRIC	DATA	
HEF :	7,4190 80.		- · · ·	350 IN.				BETA =	.000	CONFIG =	3.000
LREP .	2,1020 IN	_	_	000 IN.				RUDDER =	.000	RUDFLR =	10.000
BREF .	4.0300 IN	. ZHRP	* .0	000 IN.				ELEVIR =	.000	GBDELA ≥	.000
SCALE *	.9040						•	180ELY =	.000	AILRON =	40.000
								OBDAIL =	10,000	TROAIL =	10.000
		RUN	NO. 184/ 0	RN/L =	6.69 GRA	DIENT INTER	VAL = -5.00	0/ 5.00			
MACH	ALPHA	CN	CLH.	CY	CYN	CBL	CAF	CAB	CL.	Ф	L/O
1,200	.750	00920	.04320	.00240	.00450	.04320	.08890	.04270	~,01040	.08880	11730
1,200	2.690	.12300	.01180	.00160	.00400	.04360	.08880	.04270	.11630	,09490	1,24720
1.200	5.150	.26120	~,02260	.00060	.90260	.04220	.08730	.04230	.25230	.11050	2.28320
1,200	7,430	.40010	05360	-,00040	.00130	.04110	.08500	.04300	.38570	.13600	2,83440
1.200	9,690	.53390	-,07940	00360	.00050	.04010	.08260	.04480	.51240	.17130	2.98960
1,200	11,960	.47130	-,10290	00540	00000	,04000	.08090	.04820	.64000	.21840	2.93040
1,200	14.216	.78630	-,11710	00560	+.00240	.03630	.08100	.05020	,74230	.27170	2.73200
1.200	16,440	.89700	12300	00770	00500	.03700	.08460	,05270	.03030	.33500	2.49580
1,200	18,690	,98580 1,08440	12570	~.01390	00220	.03600	.08500	.05340	,90750	.39690	2,26620
1,200	20.900 22.950	1,12240	12790 11380	01340 00940	00440 00390	.03620	.08280	.05600	.98350	.46420	2,11630
1,200	11,960	.66890	10350	-,00610	00100	.02500 .03940	.07690	.05960	1.00350	.50870	1,97260
******	GRADIENT	.06178	01467	00028	00023	,00019	00005	.04730	.63760	.21780	2,92760
	WAD LEVI	.00.70	01407	-,00026		*00013	~,00000	.00000	.96014	.00285	.63762
		RUN I	NO, 144/ 0	RN/L =	6.76 GRAI	DIENT INTER	VAL = -5.00	5,00			
MACH	ALPHA	CN	CLM.	CY	CYN	CBL	CAF	CAB	a.	69	L/0
1.956	.745	.02440	00940	.01560	00060	.01730	.07590	.02420	.02350	.07620	.30820
1.956	2,610	.10450	02350	.01390	00070	.01690	.07510	.02430	.10070	.08020	1.25520
1,956	5,010	,19510	03980	.01160	00110	.01600	.07630	.02480	.18570	.09290	1.99900
1,956	7,190	.27220	05270	,00970	00110	.01600	.07580	.02550	.26060	.10930	2.38250
1.956	9,360	.35540	06700	,00830	00120	.01850	.07570	.02660	.33630	.13260	2.54990
1.956	11.560	.43310	07960	,00660	00140	.01880	.07500	.02720	.40930	.16030	2.55210
1.956	13.740	.51260	09080	.00530	00200	.01910	.07410	.02750	.48030	.19360	2.47790
1.956	15.940	.59440	10130	.00330	~,00320	.01990	.07250	.02660	.55160	.23300	2,36700
1.956	18,150	.67750	11110	.00040	00400	,02100	.07050	.02630	.62180	.27820	2.23520
1,956	20,340	.75250	~.11580	00230	00370	,02230	.06810	.02640	.68190	.32550	2.09460
1.956 1.956	82.430	.81870 .42330	11690 07390	00440 .00750	~.00520	.02360	.06610	.02740	.73150	.37368	1,95780
*****	11.540	.42350	07390 - 10ee1	- 00000	00150 - 00005	.01780	.07360	.02710	.40000	.15690	2.54920

MSSS (FAS) MAR ATP ORB (B1C1D1F1M1) (W1E1) (Y1K1R1) (R76320) (03 NOV 72

	REFEREN	CE DATA							PARAMETRIC	DATA	
MET +	7.4190 89	.1N. 104RI	3,45	30 IN.				BETA =	.000	CONFIG =	3,000
LREP &	8.1020 TH	, YHRI	.00	00 IN.				RUDDER =	.000	RUDFLR =	10.000
BREF 4	4,0300 IN	, ZHRI	.00	100 IN.				ELEVTR =	.000	OBDETA =	.000
SCALE .	.0040							180ETA =	.000	ATLRON =	10.000
								CBDAIL *	10.000	IBDAIL =	10,000
		RUN	NO. 181/ 0	RN/L =	4,96 GRA	DIENT INTER	YAL = -5,0	0/ 5.00			
MACH	ALPHA	CN	GLM	CY	CYN	CBL	CAF	CAB	CL.	60	L/O
.895	82,000	.84670	01160	-,00440	.00000	.01820	.01200	.04760	.78050	.32840	2.37670
.995	23,920	.87880	-,00770	.00250	.000060	.01520	.01000	.05240	.79930	,36560	2.16620
.995	25,960	,91490	00540	.00950	00100	,01520	.00780	.05690	.61910	.40760	8.00920
.895	28,030	.96630	01150	.02310	00210	.01070	.00520	.06200	.85050	.45880	1.85360
.595	30,100	1,05100	-,02650	.02120	.00440	.00780	.00230	.06610	.90800	.52920	1,71550
.595	32,180	1.13330	03780	.01150	.00790	0Se00.	00060	.06690	.95940	.60320	1.59060
.595	34.270	1,20680	-,04000	.00310	.00620	.01500	00500	.07010	1.00000	.67551	1.48630
.595	36.350	1,27620	03750	00050	.00400	.01720	+.00970	.07230	1.03360	.74860	1,36070
.595	38,460	1.34500	- .03 820	.00040	.00200	.01610	01620	.07340	1,06320	.82400	1,29030
.895	40.510	1.40930	-,03800	.00070	<i>Te</i> 000.	.01530	02460	.07550	1.08730	.89690	1.21220
.895	42.510	1,46350	03920	.00450	-,00040	.01480	03100	.07530	1.09980	.96600	1,13840
.595	32.220	1.13670	03330	.00830	05600.	.01010	.00050	.06640	.96130	.60670	1.58450
	GRADIENT	.03202	-,00186	-,00025	,00009	.00003	00204	.00134	.01735	.03209	85904
		RUN	NO. 180/ 0	RN/L =	6.27 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN CN	Q.M	ĊY	CYN	CBL	CAF	CAB	a ∟	0	L/0
.000	22.830	.90190	.01230	.02230	00520	.02050	.03600	.06010	.81640	.36500	2.12010
.900	24,790	.95020	.01390	.01950	00480	.02460	.03680	.06240	.84720	.43190	1.96130
.900	26,930	1,03880	.00070	.01880	00240	.02280	.03490	.06700	.91030	.50170	1.81450
.900	29.130	1.12900	01390	.00990	.00000	.02290	.03210	.06820	.97850	.57770	1.67990
900	31,330	1.22510	01640	00340	00020	.02770	.02610	.07090	1.03290	.65940	1,56630
.000	33.450	1,30810	01800	00920	00120	.03040	.02010	.07250	1.08030	.75790	1.46390
.900	35.610	1.38890	01750	.00050	-,00800	.02800	.01060	.07380	1.12280	.81760	1.37350
.900	37.710	1,44750	01090	.02620	01160	.01870	.00000	.07550	1.14510	.88540	1.29320
.900	39,690	1.51730	01590	.03230	00990	.01520	00720	.07530	1,16860	.96770	1.20760
.900	42,020	1.59970	02200	.02580	00830	.01560	-,01060	.07480	1.19540	1,06310	1.12440
200.	44.020	1,64240	02150	.01830	~,00680	.01650	01820	.07530	1,19360	1,12840	1.05770
.900	\$3,440	1.30880	01760	00800	-,00080	.03030	.02050	.07230	1.08080	.73830	1,46370
	GRADIENT	.03631	00152	.00035	00031	-,00037	00288	,00071	.01912	.03578	04867

MSSS (FAS) MAR ATP ORB (BICIDIFIHI) (MEI) (VIKIRI)

(R76326) (03 HOV 72)

REFERENCE DATA				PARAMETRIC DATA							
ener .	7,4190 8		P = -3,4	550 IN.				BETA =	.000	CONFIG =	3.900
LREP =	2,1020 [H. YMRI	P = ,(141 BOOK				RUDDER =	.000	RUDFLR =	10.000
BREF =	4,0300 1	N. ZMRI	P 2 ,0	1000 IN.				ELEVIR =	.000	OSDELV =	.000
BCALE =	,0040							TROELY =	.000	AILRON =	10.000
			*		5			CBOATL =	10,000	IBDAIL =	10.000
		RUN	NO. 140/ 0	RN/L =	4.13 GRA	DIENT INTER	RVAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	œ	L/D
2.990	21.010	.63170	DT680	-,00240	-,00250	.01900	.05810	.01360	.56490	.28870	1.95620
2.990	23.760	.70800	09760	+.00430	-,00210	.02050	.05770	.01390	.62450	.33840	1,84540
2,990	25,900	.76730	-,10790	-,00810	00230	.02150	.05730	.01400	,68320	.39550	1.72750
2,990	26,000	.87120	11710	01000	-,00210	.02290	.05690	.01418	.74250	.45930	1,61640
2.990	30,100	.95690	12700	01230	00320	.02440	.05680	.01410	.79930	.52910	1,51050
2.990	32.210	1.04540	13660	01170	00490	.02700	.05660	.01430	.85430	.60520	1,41160
R.990	84,540	1.13760	14580	01140	90640	.02950	.05660	.01410	.90740	.68870	1.31740
8.990	36,430	1.22770	15700	01430	00720	.05120	.05670	.01420	.95400	,77460	1,23120
11,990	36.560	1.31880	16610	01970	00568	.05120	.05630	.01420	.99570	.85660	1,14890
8,990	40.650	1.40630	17520	02460	~.90510	.03200	.05630	.01410	1.05020	.95890	1.07430
2.990	42,670	1,48960	16460	-,02780	00560	.05500	.05620	.01400	1.05700	1.05110	1.00560
	GRADIENT	.04145	00458	00109	00022	.00072	*,00008	.00002	.02404	.03680	04563
		RUN	NO. 139/ 0	RN/L. =	4.87 GRAI	DIENT INTER	VAL = -5.00	0/ 5.0 0			
MACH	ALPHA	ON .	CLM	CY	CYN	CBL.	CAF	CAB	a.	69	L/D
4.959	21,410	.51580	06710	00448	00550	.01790	.05420	.00290	.46040	.23880	1,92790
4,959	23,360	.58440	07640	00800	00270	.01940	.05510	.00310	.51460	.28240	1,62240
4,959	25,410	09569.	08200	-,00870	00250	02090	.05640	.00320	.57430	.33540	1,71220
4.959	27,490	.74000	090 90	01070	00500	.02250	.05720	.00320	,62990	.39240	1,60520
4,959	29,550	.82020	 , 0999 0	01210	-,00380	.02470	.05780	.00530	.68500	.45480	1,50580
4,959	31,610	.90610	-,11090	01510	00590	.02620	.05950	.00340	.74050	.52570	1,40860
4,959	33.690	.99150	12190	01650	00450	.02760	.06040	.00330	.79140	.60030	1.31830
4.959	35.750	1.07760	13660	02060	-,00470	.02870	.06150	.00330	.83860	.67950	1.23410
4,959	37.850	1.16490	14780	02360	00500	.03010	.06220	.00330	.88160	.76390	1.15400
4.959	39.850	1.24900	15970	02550	00520	.03120	.06270	.00320	.91670	.84850	1.08260
4.959	41.620	1,33210	17030	-,02740	00570	.03250	.06260	.00320	.95080	.93500	1.01680
	GRADIENT	.04024	-,00513	00112	00017	.00072	.00045	.00001	.02440	.03430	04478
											0

. 901

. 901

.901

.901

.901

.901

.901

.901

7.180

9,360

11.550

13,740

15.900

16,150

20.260

22.300

11.550

GRADIENT

.29950

.39420

.50190

.61520

.72000

.82410

.88050

.92910

.90520

.05408

.00410

.00320

-.00440

-.01870

-.02860

-,03050

~.01630

-.00860

-.00570

-.00617

.01230

.01410

.00930

,00590

.00150

.00320

.01510

.00910

.01200

-,00193

-.00030

-.00160

-.00140

-.00200

-.00230

-.0044D

-.00710

-.00490

-.00150

.00005

.02880

.02750

.02850

.02830

.02740

.02340

.01340

.01490

.02830

.00128

.03520

.03690

.03600

.03530

.03590

.03710

.03530

.03050

.03650

-.00119

.02580

.02790

.03130

.03540

.03980

.04920

.05730

.06170

.03110

-.00016

.29270

.38300

.46450

.58920

.68260

.77150

.81370

. 84800

.48760

.05325

MSSS (FAS) MAR ATP ORB (BICIDIFINI) (WIEI) (VIKIRI)

(R76321) (ST YOM ED)

.05360

.07240

.10050

.13580

.18050

.23190

.29210

.33810

.38090

.13700

.00227

2.99330

4.04310

3.60720

3,56660

3.26360

2.94330

2,64070

2,40650

2,22640

3,55920

1.05696

PARAMETRIC DATA

REFERENCE	

SRET 7.4190 89.1N. WEF 3.4530 IN. BETA .000 CONFIG # 3.000 LREP 8,1020 IN. YMRP .0000 IN. RUDDER = .000 RUDFLR = 10.000 SREF 4,0300 IN. ZHOP .0000 IN. ELEVTR = .000 OBDELY : ,000 SCALP & .0040 IBOELY = .000 ATLRON = 10.000 GBDAIL = 10.000 IBOAIL = .000 RUN NO. 178/ 0 GRADIENT INTERVAL = -5.00/ 5.00 4,96 MACH ALPHA ON. **QUM** CY CYN CBL CAF CAB Œ Œ L/D .595 .660 -.03460 .02520 -01600 .00000 .02860 ,03500 .02120 -.03500 .03460 -1.01220 .595 2.670 .08700 .01840 .01360 .00100 .02990 .03400 .02110 .06540 .03710 1.76230 .595 4,770 .16170 ,01050 .00870 .00190 -03100 .02960 .02100 .15860 .D4290 3.69390 . 595 6,890 .26230 .00260 .00480 .00240 .03280 .02310 .02160 .25760 .05440 4.73220 .595 9.000 .37420 -.01140 .00550 .00090 .03210 .01770 .02270 .36680 .07600 4,62300 .595 11.100 .47290 -.01750 .00790 -.000060 .02790 .01460 .02370 .46110 .10570 4.36310 .595 .57440 13.210 -.02750 .00570 -,00170 .02690 .01250 .02470 .55640 .14350 3.87740 .895 15.260 .65470 -.02930 .00650 -.00330 -02260 .01020 .02860 .62880 .18240 3.44660 . 595 17.420 .74680 ~.03160 .00510 -.00420 .02150 .00800 .03280 .71010 .23140 3.06890 .593 19,480 .80900 -.02980 .00610 -,00540 .01960 .00710 .03790 .76030 .27651) 2.74960 -,00530 .895 21.460 .67320 -.02540 .00760 .01440 .00550 .04490 .61060 .3247() 2.49640 .595 11,100 .46720 -.01750 .00790 -,00100 .02660 .01580 .02330 ,45540 .10550 4.31560 GRADIENT .04774 -,00358 -.00176 .00046 .00058 -,00132 +.00005 .04708 .00203 1.14336 RUN NO. 176/ 0 RN/L = 6.26 GRADIENT INTERVAL = -5.00/ 5.00 MACH ALPHA ĊN. CL,H CY CYN CBL CAF CAB Œ Ф L/D .901 .630 -.06790 .04940 .02280 -.00070 .02100 .04470 .02650 -.06630 .04390 -1.55510 .901 2.730 .04210 .03910 .01650 -.00050 .02230 .04320 .02640 .04000 .04520 .88530 .901 4.930 .16460 .02290 .01450 -.00050 .02650 .03960 .02580 .16060

.05786

-.00636

-.00092

.00010

-.00019

-.00039

MSSS (FAS) HAR ATP CRE (BICIDIFINI) (MEE) (VIKIRI)

.03655

.00010

.00180

				MANAGEMENT HANG WIN CHE (BICIDIFINI) (MIEI) (VIKIRI)						(RF6321) (03 NOV 72)			
	REFEREN	ACE DATA			•					PARAMETRIC DAYA			
UPET .	7.4190 80		P + 3,	4530 IN.				SETA =	.000	CONFIG :	3.000		
LREF .	2.1020 p		•	0000 IN.				RUDDER =	.000	RUDFLR =	10,000		
BREF #	4,0800 1	4. ZMRI	P = 2	0000 IN.		•		ELEVIR =	.000	OBDELY =	.000		
SCALE =	,0040							180ELV =	.000	ATLRON =	10.000		
								CBDAIL =	10,000	IBOAIL =	.000		
		RUN	NO. 177/	0 RNVL =	6.68 GR	WIENT INTER	RVAL = -5.0	00/ 5.00					
MACH	ALPHA	CN CN	CLH	CY	CYN	CBL	CAF	CAB	α.	œ			
1,196	.790	.00050	,04180	.02240	00220	.02620	.07640	.04110	00050		L/0		
1,196	2.910	.12900	.01250	.01920	00200	.02700	.07560	.04070	.12500	.07640	00660		
1,196	8,170	.26620	01960	.01680	00240	.02610	.07370	.04160	.25850	.08220	1.51970		
1.196	7.430	.39750	04930	.01260	00290	.02460	.07170	.04120	.25650	.09740	2.65370		
1.196	9,710	.53260	07550	.00870	00300	.02390	.07080	.04200	.51310	.12260	3.13830		
1,196	11,950	.65760	-,09670	.00360	00270	,02290	.07070	.04210	.62870	.15970	3,21180		
1,196	14.210	.76200	11270	00040	00260	.02120	.06960	.04640	.74090	.20540	3,06020		
1.196	16.430	.08530	-,12210	00830	00050	.02520	.07160	.05040	.82880	.25940	2,85550		
1.196	18,690	.99750	13320	01210	-,00130	.02580	.07140	.05430	.92200	.31920 .38740	2.59660		
1,196	20,900	1.09750	13670	01100	-,00340	.02380	.06840	.05590	1.00080	.45550	2,37980		
1,196	22,940	1.14620	12720	00810	00370	.01910	.06470	.05780	1.03030	.50650	2.19710		
1.196	11,950	.65900	09860	.00310	00280	.02280	.07070	,04260	.63010	.20560	2,03420		
	GRADIENT	.06061	-,01382	00151	.00009	.00038	00028	00019	.05920	.00274	3.06370 .71995		
		RUN	NO. 143/ 0	RN/L =	6,75 GRA	DIENT INTER	VAL = -5.0	0/ 5,00					
MACH	ALPHA	GN	CLM .	CY	CYN	CBL,	CAF	CAB	QL.	6 0			
1,954	.750	.02160	00780	.01780	~.00130	.01110	.07090	.02540	.02090	.07120	L/D .29390		
1.954	2.790	.09980	02090	.01590	-,00110	.01070	.07010	.02560	.09620	.07490	1.26500		
1,954	9.010	.16990	-,05690	.01310	00110	.01140	.07170	.02550	.18290	.08800	2.07730		
1,954	7,200	.27260	8 5160	.01030	00090	.01160	.07120	.02660	.26150	.10490	2.49270		
1.954	9.390	.35480	06550	.00890	000e0	.01210	07120	.02660	,33840	,12820	2,63940		
1.954	11.560	.42840	07540	.00760	~,00060	.01230	.07010	.02610	.40570	,15450	2.62460		
1.954	13,730	.50170	08440	.00570	00080	.01286	.05850	.02620	.47110	.18570	2,53660		
1,954	15,950	.58410	09500	.00300	00130	.01360	.06730	.02660	.54310	.22530	2.41070		
1,954	18,160	.66390	10230	00040	00180	.01480	.06530	.02640	.61050	.26910	2.26860		
1.954	20,340	.74700	11140	00470	00130	.01640	.06380	.02650	.67820	.31960	2.12190		
1.954	22,420	.81270	11220	-,00710	00060	.01780	.06120	.02720	.72790	.36670	1,98470		
	GRADIENT	.03786	00636	nnnee	00010	- 00040					#O4 / U		

.902

.902

41.970

44.040

35,470

GRADIENT

1.58360

1.66230

1.33650

.03499

-.02460

-.02840

-,02940

-,00081

.01670

.00950

-.01730

.00067

-.00500

-.00400

.00120

-.00028

.01060

.01220

.02460

-.00024

-.01640

-.02220

.01370

-.00256

.07510

.07560

.07200

.00072

1.18830

1,21030

1.10720

.01778

1,04690

1,13970

.74870

.03565

1,13510

1.06190

1.47880

~.05133

MSSS (FAS) NAR ATP ORB (BICIDIFINI) (WIE1) (VIKIRI)

(R76322) (03 NOV 72)

										• -,	
	REFEREN	KE DATA							PARAMETRIC	DATA	
SAEF II	7,4190 80		-	530 IN.				BETA =	.000	CONFIG =	3.000
LREF #	41 0201.8			0000 EN.				RUDDER =	.000	RUDFLR =	10.000
BREP =	4.0300 th	i. ZHRP	* .0	1000 IN.				ELEVIR =	.000	CBDELA =	.000
SCALE =	,0040							IBDELY =	.000	AILRON =	10.000
								CBDAIL *	10,000	IBDAIL =	.000
		RUN	NO. 174/ 0	RN/L =	4.97 GRA	DIENI INTE	RVAL = -5.0	0, s.00	-		
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	Cr.	æ	L/0
.596	52.000	.67020	02110	-,00440	00100	.01170	.00310	.04760	.80560	.32900	2,44840
.596	23,940	.69560	01770	00460	.00050	.01140	.00310	.04980	.81730	.36630	2,23090
.595	25.990	94460	-,01670	.00360	00100	.61040	.00050	.05490	.84900	.41450	2,04790
.898	28,060	.99030	02370	.01960	00250	.00440	00103	.05980	.87430	.46490	1,88050
.596	30,120	1,06490	03710	.01700	.00500	.00060	00440	.05520	.92330	.53070	1,73980
. 596	32.210	1.14970	04540	.00260	.00960	.00290	-,00820	.06880	.97720	.60580	1.61260
.596	34,260	1.22420	04700	-,00440	.00810	.00920	01290	.07120	1.01870	.67890	1.50050
.596	36,350	1,28110	04490	00240	.00570	.01090	~,01640	.07200	1,04180	,74570	1.39690
.896	38,440	1.34630	04620	00140	.00320	.00960	02280	.07370	1.06870	.61910	1,30470
.896	40,490	1,40600	04760	.00290	.00260	.00850	03050	.07530	1.08900	.88990	1,22370
.000	42,490	1,47810	04920	,00240	.00270	.00860	03620	.07810	1.11560	.97030	1.14970
.596	32,220	1,15270	-,04470	.00480	.00650	.00410	-,00680	.06820	.97990	.60710	1.61400
	GRADIENT	.03101	-,00177	00007	,00026	00004	-,00199	.00151	.01644	.03168	-,06154
		RUN I	10. 175/ O	RN/L =	6.28 GRA	DIENT INTER	NVAL = -5.0	0/ 5,00			
MACH	ALPHA	CN	CLH	CY	CYN	CBL.	CAF	CAB	CL.	6	L/0
.902	22,830	.93670	-,00610	.00640	00290	.01440	.03110	,06040	.85120	.39220	2.17020
.902	24,620	.98160	-,00500	.00620	00250	.01640	.02650	.96350	.87970	.43620	2,01690
.902	26,960	1,05990	-,01740	.00460	00050	.01510	.02350	.06540	,93400	.50150	1.86220
.902	29,130	1.15760	02870	00340	.00216	.01670	.02350	.06700	.99960	.58420	1,71110
.902	31.300	1,24370	02900	01780	.00370	.02210	.01900	.06870	1,05280	.66240	1,58910
30ê,	33,490	1,34800	-,03130	01810	00000	.02500	.01550	.07140	1,11540	.75690	1.47360
.902	35,640	1.41750	-,02550	00760	-,00400	.02170	.00720	.07330	1.14770	.83180	1.37970
.902	37,740	1.47230	-,02110	.01680	~,00910	.01340	00220	.07530	1.16560	.89950	1.29570
.02	39.890	1,51970	-,02380	.02130	00690	.01000	00990	.07480	1,17240	.96700	1.21230
802	41 970	1 80340	- 00440	040	- 00000						

.04034

-.00507

-.00115

-.00006

.00049

.00035

.00001

MSSS (FAS) NAR ATP ORB (BICIDIFINE) (MEE) (VIKIRE)

(R76322) (03 NOV 72)

.02465

.03423

-.04560

								•	18763	EE) (US N	K)V 7E }
	REFERENCE DATA								PARAMETRIC DATA		
SREP .	7,4190 8		-•	1550 IN.				SETA =	.000	CONFIG =	3.000
LREF =	8,1020 T			1000 IN.				RUDDER *	.000	RUDFLR =	10.000
BREF =	4,0300 1	N. ZMRI	P = , .c	1000 IN.				ELEVTR =	.000	OBDELY =	.000
SCALE =	.0040	•						180ELV =	.000	AILRON =	10.000
								CBOAIL =	10,000	TBOATL =	.000
\.		RUN	NO. 141/ 0	RN/L =	4.13 GRA	DIENT INTE	RVAL = -5.0	30/ 5.00			
MÁCH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	6	L/0
8,990	21,610	.62670	-,06410	00440	~.00070	.01410	.05510	.01370	.56320	,2848Q	
2.990	23.760	.70140	09160	00720	~.00060	.01480	.05420	.01390	.62003	.33240	1,97750
2.990	25,900	.76370	09990	00900	00020	.01560	.05340	.01410	.68160	.39040	1.74560
2.990	26,000	.86780	10960	01190	.00000	.01630	.05280	.01420	.74130	.45420	1,63220
2,990	30,110	.95330	11940	01410	00060	.01740	.05210	.01410	.79850	.52530	1.52580
2,990	32.210	1.04000	-,12780	01310	00210	.01980	.05160	.01410	.85230	.59810	1.42490
2.990	\$4.320	1.12990	13850	01440	00360	.02150	.05110	.01390	.90430	.67930	1.33100
2,890	36.430	1,21690	14718	01600	00420	.02290	.05100	.01390	.95030	,76500	1,24210
2.990	38.560	1.31040	15680	02240	00240	.02260	.05000	.01380	.99340	.85610	1.16030
2.990	40,650	1.39770	16630	-,02810	00160	.05550	.04970	.01350	1.02800	,94630	1.08400
2.990	42.670	1,47950	17360	-,05130	00140	.02250	.04930	.01330	1,05430	1,03910	1.01450
	GRADIENT	.04115	00438	~.00116	00011	.00048	00027	-,00002	.02403	.03644	04621
		RUN	NO. 142/ 0	RN/L =	4.85 GRAI	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	œ	L/0
4,959	21.450	.90950	05960	00580	00050	.01340	.05120	.00270	.45560	.23380	1.94810
4.959	25.360	.57780	06730	00820	00080	.01430	.05120	.00300	.51010	.27610	1,84700
4,959	25,430	.65390	07330	01120	-,00050	.01520	.05180	.00320	.56820	.32770	1.73400
4,959	27,490	.73370	08230	01200	0009C	.01660	.05230	.00330	.62660	.38510	1.62690
4.959	29,550	,61390	09150	01330	00130	.01820	.05338	.00330	.68170	,44780	1.52220
4,959	31,610	.89720	10390	01740	00150	.01690	.05410	.00330	.75570	.51640	1.42460
4.959	33,690	.98440	11550	01930	-,00170	.02010	.05530	.00320	.78830	.59210	1.33130
4.959	35,730	1,06990	12550	02170	00160	.02090	.05590	.00320	.83580	.67020	1.24690
4.259	37.810	1.15620	13770	-,02470	00140	.02160	.05660	.00316	.88030	.75480	1.16610
4.959	39.650	1.24430	15040	02760	00170	,02240	.05740	.00310	.91840	.84140	1.09140
4.959	41.850	1.32700	16120	02890	00160	.02300	.05720	.00510	.95020	.92800	1.02390
	GRADIENT	.04034	- 00507	- 6644	- 00000	000.0					

GRADIENT

.48670

,05432

.01310

-.00526

00500

-,00137

.00080

.00016

.00370

.00018

.03650

-.00206

.03710

-.00011

.46950

.05353

.13330

.00081

3.52050

			M55	MS99 (FAS) NAR ATP ORB (BICIDIFINE) (MEE) (VIKIRE)						(R76525) (03 NOV 72)		
	REFEREN	CE DATA							PARAJETRI	BATA		
	7.4190 80	1.1N. 1948F		4530 IN.		•		BETA =	.000	CONFIG #	3.500	
LREP =	8.1020 TH	I. YHRF	-	0000 IN.				RUDDER =	.000	RUDFLR =	40.000	
BREF =	4,0300 IN	i. ZHRP		0000 IN.				ELEVTR =	.000	CBDELV =	.000	
SCALE .	.0040		•					IBDELY =	.000	ATLRON =	.000	
								CEDAIL =	.000	IBDAIL =	.000	
		RUN	NO. 169/	O RHVL =	4.96 GR	ADIENT INTER	IVAL = -5.	00, 5,00				
MACH	ALPHA	OH	CLM	CY	CYN	CBL.	CAF	CAB	CL.	. 00	L/D	
.895	.000	-,04890	.04560	.02210	00030	.00140	,04120	.02840	-,04940	.04060	-1,21560	
.595	2.660	.04400	.03620	.02020	00020	.00170	.04070	.02740	,04200	.04270	.98410	
.895	4,770	.14210	.03210	.01710	05000.	.00210	.03590	.02690	,13860	.04760	2,91060	
.695	6.690	.23630	.02410	.01580	.00050	.00250	.03040	.02600	.23290	.05670	3,96290	
.595	0.990	.34640	.01120	.01400	.00020	.00290	.02410	.02750	.33840	.07800	4,33410	
,595	11,100	.45580	~.00090	.01360	.00000	.00280	02090	.02820	.44330	.10830	4,09050	
.895	13,210	,56490	01210	.01020	.00020	.00150	.01600	.02970	.54560	14670	3,71690	
.595	15,260	.65330	01610	.00840	.00010	.00170	.01640	.03260	.62590	.18810	3,32680	
.695	17,440	.74500	01760	,00570	-,00030	.00270	.01360	.03740	,70660	.23540	2,98840	
.595	19,460	.81510	01870	,00340	00130	.00230	.01120	.04340	.76470	.28240	2.70710	
.595	21,460	.67480	-,01450	.00100	-,00080	00030	.00980	.04900	81050	.32930	2.46120	
.595	11.110	.45600	.00270	.01410	02000.	.00190	.02110	.02860	.44330	.10860	4,08000	
	GRADIENT	,04681	00330	00123	.00012	.00017	00131	00037	,94607	.00172	1.01016	
		RUN	NO. 170/	RN/L =	6.29 GR/	DIENT INTER	VAL = -5.0	0/ 5.00				
MACH	ALPHA	CN CN	Q.H	CY	CYN	CBL.	CAF	CAB	α.	co	L/D	
.901	.640	-,10150	.07840	.02500	-,00110	.00000	.04970	,03140	10210	.04860	-2,09980	
.901	2.710	.00660	.Des50	.02070	00040	.00090	.04710	,03060	,00440	.04740	.09320	
.901	4.920	.13090	.05590	.01910	00040	08000.	.04090	.03090	.12690	.05200	2,43890	
.901	7.170	.25650	.04160	.01640	-,00060	,00120	.03630	.03230	.25170	.07020	3,58050	
.901	9.360	.37000	.03050	.01200	.00000	.00210	.03930	.03370	.35860	.09900	3,62080	
.901	11,550	.48410	.01390	.00570	.00090	.00370	.03600	.03680	.46660	.13420	3,47690	
.901	13.760	.60510	00250	00198	.00200	.00540	.03790	.04120	.57870	.10080	3,20110	
.901	15.920	.71550	01338	-,00920	.00240	.00570	.03750	.04710	.67580	.23180	2,91530	
.901	16,170	.81440	01510	00760	.00130	.00250	.03820	.05410	.76190	.29030	2,62440	
.901	20,260	.87730	~.00410	00220	.00050	00590	.04020	.06260	.80890	.341.80	2.36610	
.901	22.510	.91950	.00430	01040	.00300	+.00230	.03680	.06580	.83660	.38320	2,18300	
.901	11.560	.48670	81346	BOKON	nonen	00770	63een	07-40	40000			

11.540

GRADIENT

.40500

.03898

-,05080

~.00684

.00500

-.00102

.00270

.00029

.00050

-,00019

.07800

-.00049

.02570

.00058

.70650

.37920

.03752

.36390

.15710

.00155

1.94110

2,41310

			M59	S (FAS) HAR	ATP ORB IB	ICIDIFIHI) (ME	1) (V1K1R1)		(R763)	:3) (03 H	10V 72)
	REFEREN	KE DATA							PARAMETRIC	DATA	
sker .	7,4190 80	.IN. 198P	. 3.	4530 [N.							
LPEF .	2,1020 1			0000 IN.				BETA #	.000	CONFIG =	3.000
BREF =	4.0300 11			0000 IN.				RUDDER =	.000	RUDFLR =	40,000
SCALE =	.0040		•	4005 IN.				ELEVTR =	•000	OBDELA =	.000
								IBOELV =	.000	AILRON =	.000
								OBDAIL =	.000	IBDAIL =	.000
		RUN HC	. 171/	G RN/L =	6.68 G	RADIENT INTERV	AL = -5.00	3/ 5.00			
HACH	ALPHA	CN	CL.H	CY	CYN	CBL	CAF	CAB	_	_	
1.199	.010	02580	.07950	.01610	,00000	.00060	.00000	.04000	a.	CD.	L/Q
1,100	2.930	.10580	.04780	.01350	.00070	,00140	.08730	.04190	-,02700	.08970	30180
1.199	5,200	.24290	.01350	,01020	.00130	.00130	.08570	.04250	.10120	.09260	1.09290
1.199	7.460	.37770	01750	.00760	.00190	.00100	.08470	.04090	.23410	.10730	2.16050
1.199	9,710	.50950	+.04550	.00250	.00220	.00160	.08330		.36350	.13300	2.75180
1,199	11,960	.63960	06750	00220	gesoo.	.00120	.08220	.04080	.48810	.16810	2.90320
1.199	14,220	.76550	08810	00560	.00300	.00150	.08170	.04200	.60860	.21310	2.65570
1,199	16,420	.66080	09230	01280	.00470	.00400	.08160	.04390	.72000	.26680	2.69840
1,199	10,730	.96330	09700	01120	.00210	,00180	.08040	.04800	.80260	.32170	2.49450
1,199	20,690	1,06470	10820	01360	.00190	.00260	.07760	,05380	.88640	.38560	2.29848
1.199	22,950	1.12550	10320	01490	,00220	.00260	.07460	.05480	.96690	.45230	2.13780
1,199	11.970	.64170	06870	00240	,00270	.00130	.08280	.05860	1.00710	.50750	1.98400
	GRADIENT	.06208	01495	00123	.00033	.00036	00127	.04110	.61060	.21420	2.65040
				•	10000	•00006	-,outer	ae000.	.06047	.00137	.65788
		RUN NO	104/	D RN∕L =	7.15 GR	ADIENT INTERVA	\L = -5.00	/ 5.00			
MACH	ALPHA	CN	C LM	CY	CYN	CBL	CAF	CAB	a.	69	L/D
1.960	.750	.00850	.01360	.01460	,00040	.00060	.08310	.02420	,00740	.08320	.08960
1.000	2.610		00050	.01250	.00100	.00020	.08210	.02540	.08470	.08640	.98000
1.960	9.020		01520	.01020	.00130	.00010	.08260	.02410	.16390	.09730	1.88380
1.960	7,200		02970	08800.	,00200	.60020	.08150	.02600	.24080	.11260	2,13860
1.960	9,370		04170	.00630	.00240	.00030	.07940	.02630	.31210	.13200	
1.960	11.550	.40800	05\$50	.00520	.00270	.00060	.07920	.02540	.38398	.15930	2,36330
1.960	13,760		06590	.00510	.00270	.00110	.07750	.02540	.45720	.19190	2,40890
1.960	15.950	.\$675G	07520	.00000	.00260	.00170	.07530	.02620	.52500	.22840	2.38270
1.960	18.160	.64480	08050	00290	.00270	.00240	.07290	.02630	.59000	.27030	2.29760
1.960	20.550	.71640	08460	00628	.00320	DeSDO.	.06980	,02640	.64740	.31450	2.18210
1,960	22.420	.79200	09060	01090	.00440	.00440	.06690	.02730	.70650	.36390	2.05870

.01943

-.00107

-.00032

-.00005

MSSS (FAS) MAR ATP ORB (BICIDIFINI) (WIEL) (VIKIRE)

(RT6323) (05 NOV 72)

	REFEREN	CE DATA							PARAMETRIC	DATA	
SACE I	7,4190 89	, IN, WAP	1 3,4	530 IN.			,	BETA =	.000	CONFIG :	3.000
LREF #	2,1020 IN	. YHRP	۰, .	000 IN.				RUDDER =	.000	RUDFLR =	40,000
BREF B	4.9300 IN	. 214RP	.0	000 IN.				ELEVIR =	.000	OBDELY =	.000
SCALE .	.0040							IBDELV =	.000	ATLRON =	.000
								CEDAIL =	.000	IBDAIL =	.000
		RUN N	io. 105/ 0	RN/L ±	4,62 GRA	DIENT INTER	VAL = -5.00	3, 5.00			
MACH	ALPHA	OΗ	ам	CY	CYN	CBL	CAF	CAB	Cr −	G	L/D
2.090	.670	01210	-,00570	.01010	.00100	.00000	.07590	.01200	01300	.07560	-,17190
2.990	2,640	.04070	DO950	.00940	.00100	.0000 0	.07420	.01240	.03730	.07600	.49040
2,990	4,710	.09450	-,01360	.00790	.00110	.00040	.07270	.01260	.98820	.08020	1,09960
2.990	6,600	.15190	01950	.00550	,00110	,00040	.07130	.01270	.14240	.08880	1.60400
2.990	8,650	.21010	-,02490	.00500	.00150	.00000	.06960	.01290	.19690	.10110	1,94680
2.090	10,920	.27120	-,03170	.00290	.00140	00000	.06790	,01290	.25340	.11810	2,14600
000,5	13,000	.33630	03620	.00240	.00130	.00120	,06630	.01290	,31280	,14030	\$.22900
2.990	15.000	.40210	-,04410	.00000	.00180	.00150	.06470	0eS1D,	,37140	.16720	2.22130
2.990	17,190	.47440	05220	00300	.00230	.00160	.06260	.01280	.43470	.20000	2,17260
2,990	19.260	.84740	06160	-,00610	.00300	.00160	.05980	.01310	.49700	.23710	2.09620
2,990	21.270	.62040	07110	00820	.00340	.00170	.05730	.01350	.55730	.27850	2.00110
2.990	10.930	.27270	03070	.00420	.00140	.00090	.06790	.01300	.25490	.11840	2,15290
	THETCARD	.02656	00196	-,00055	\$0000,	.00010	~.00079	.00015	.02505	.00110	.31460
		RUN N	D. 106/0	RN/L =	5.47 GRA	DIENT INTER	VAL = -5.00	5,00			
MACH	ALPHA	CN CN	CLM	CY	CYN	CBL	CAF	CAB	a.	c 0	L/0
4.959	.640	03090	01270	.00670	.00090	.00000	.06430	.00220	03170	.06400	49540
4.959	2,570	D860 D •	-,01640	.00550	.00090	.00040	.06100	,00270	.00710	.06130	.11560
4.959	4.620	.04650	01700	.00540	.00070	.00060	.05990	.00290	.04150	.06350	.65390
4.959	6.670	.06370	01770	.00530	.00160	.00060	.05800	.00320	,07640	.06730	1,13480
4.959	8.680	.12890	02170	.00240	.00190	.00060	.05450	.00290	.11910	.07350	1,62450
4.959	10,720	.17620	02460	.00250	.00190	.00080	.05180	.00330	.16350	.08370	1,95300
4.959	12.760	,22640	02690	.00160	.00170	.00140	.04980	.00320	.20980	.09870	2,12600
4.959	14,800	.27940	05050	.00040	.00180	.00150	.04790	.00340	.25790	.11770	2,19120
4.959	16.880	.53820	03790	~.00300	.00220	.00160	.04650	.00340	.31010	.14270	2,17210
4.959	18,880	.39880	04350	00560	.00270	.00200	.04640	.00350	.36230	.17300	2.09410
4.959	20.820	.45920	05120	00710	.00270	.00190	.04620	.00350	.41280	.20650	1.99820

.00015

-.00110

.00018

.01838

-.00011

.03445

-.00165

.00042

-.00003

-.00028

-.00324

.00045

.01791

.03448

-.04901

MSSS (FAS) NAR ATP CRE (BICIDIFINI) (WIEI) (VIKIRI)

(R76324) (19 OCT 72)

REFERENCE DATA					PARAMETRIC DATA						
SREP = LREP = BREP = SCALE =	7,4190 80 8,1020 () 4,0300 ()	i. YHRI	.0	550 IN. 000 IN. 000 IN.				BETA * RUDFLR *	,000 40,000	RUDOER =	.000
	.0040	RUN	NO. 175/ 0	RN/L =	4.96 GR/	DIENT INTER	₹VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	GLH	CY			·				
,595	22,040	.87200			CAN	CBL	CAF	CAB	CL.	æ	L/D
.503			00750	01230	.00350	00150	.00820	.05120	.60520	.33490	2.40430
-	23.950	.09220	00010	01760	.00600	-,00060	.00450	.05720	.81360	.36620	2.22180
.595	25,990	.93260	00030	01330	,00540	00130	.00490	.05890	.83610	.41320	2.02340
.895	28,060	.98590	-,00340	.00100	.00440	00850	.00480	.06330	.86760	.46810	1,85310
.595	30,120	1.04950	-,01810	.00170	.01130	01320	.00210	.06740	.90670	.52850	1.71530
.595	32,190	1.12690	02720	~.01070	.01620	01100	-,00160	.06848	.95440	.59910	1.59310
.595	34,270	1.20060	02640	01710	.01480	00530	00600	.07140	.99550	.67100	1.48540
.595	36.320	1.26120	02910	- 02260	.01510	-,00370	01380	.07430	1,02440	.73590	1,39200
.595	36,420	1.32510	03030	02540	.01330	00380	-,02130	.07470	1.05140	.80680	1,30310
.895	40,480	1,38700	-,03570	-,02640	.01260	00520	03500	.07740	1.07580	.87610	1.22780
.595	42,430	1,44410	03940	03070	.01260	00460	04030	.07820	1.09310	.94460	1.15710
.595	32.210	1.12810	02540	~.01120	.01540	01000	00150	.06860	.95530	.60000	1.59210
	GRADIENT	.02974	00197	00102	.00054	00010	00226	.00128	.01566	.03075	05981
		RUN	NO. 172/ B	RN/L =	6,29 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	ON	CLM	CY	CYN	CBL	CAF	CAB	α.	œ	L/D
. 902	22,840	.90900	.01300	01580	.00550	00180	.03400	.06580	,82450	.38430	2.14520
.902	24,630	.97050	.01430	01610	.00640	00030	.03250	.06780	.86710	.43700	1.98390
. 902	26.960	1.05530	.00250	01660	.00860	00160	.03260	.06770	,92570	.50770	1.82340
.902	29,170	1,15360	01100	02470	.01130	00020	.03220	,06840	.99150	.59060	1,67880
.902	31.320	1.23370	01070	05400	.01190	.00500	.02740	.06950	1.03960	.66480	1,56380
.902	33.460	1.51190	01120	03650	.01210	.00670	.01900	.07220	1.08390	.73930	1.46610
.902	35.650	1.38870	00830	01860	.00810	-,00140	.00870	.07450	1,12330	.81660	1,37550
.902	37.750	1,44120	-,00920	00530	.00680	00830	00380	.07410	1.14210	.87900	1.29920
.902	39.640	1,50040	01560	00300	.00690	00850	01530	.07450	1,16180	.94950	1.22360
.902	41.960	1.57000	02180	01120	.00720	-,00490	02110	.07430	1.18150	1.03410	1,14240
.902	43.960	1.62920	02590	01880	.00680	-,00290	02800	.07450	1.19200	1,11090	1.07300
.902	33,460	1.31530	~,01060	03740	.01160	.00680	.01840	.07280	1.08710	,74060	1.46790
	AR AD FENT	08448	- 00165	00049	00007	00000					- 1701 30

-.00490 -.00105

MSSS (FAS) MAR ATP CRB. (BICIDIFINE) (MIEE) (VIKERE)

(R76324) (19 OCT 72)

ERENCE	

GRADIENT

PARAMETRIC DATA

NO CADAL DATA				PARAMETRIC DATA							
erep = lrep = erep = ecale =	7,4190 80 8,1080 10 4,0300 10 ,0040	H. YMRI		1530 IN. 1000 IN. 1000 IN.				BETA = RUDFLR =	.000 40,000	RUDDER =	.000
		RUN	NO, 108/ 0	MH/L =	4.19 GRAI	DIENT INTER	RVAL = -5.0	00.6 \0			
MACH	ALPHA	OH.	CLH	CY	CYN	CBL	CAF	CAB	CL.	c o	L/o
2.990	21,610	.61620	07060	00610	.00340	.00110	.05550	.01360	,55140	.28050	1,96530
2.990	23,760	.66900	~,07640	~,00950	.00420	.00130	.05360	.01390	.60890	.32690	1.86240
8,990	25,690	.76870	08920	01300	.00460	.00140	.05170	,01400	.66890	.38220	1.74980
2,990	20.000	.85430	-,10000	-,01510	.00510	.00160	.04980	.01410	.73090	.44510	1.64210
2.990	30,100	.93740	-,10990	01530	.00400	.90248	.04780	.01410	.78700	.51160	1.53840
2,890	32,200	1,02790	-,12060	01400	.00210	.00430	.04640	.01400	.84490	.58720	1.43890
2,990	34,340	1,12100	13120	01330	oe000.	.00590	.04500	.01400	.90020	.66960	1.34440
R.990	36,420	1,20950	14090	-,01670	.00150	.00620	.04350	.01460	.94710	.75310	1,25740
2,990	38,570	1.30120	-,15170	02600	.00390	.00470	.04220	.01380	DeDee.	, 84440	1.17330
2,990	40,660	1,38790	-,16140	03100	.00540	.00370	.04110	.01350	1.02590	.93570	1,09640
2,990	42.640	1,46850	-,16960	-,03340	.00540	.00380	.04040	.01330	1.05280	1.02450	1.02760
	GRADIENT	,04138	-,00484	00109	,00001	,00020	00073	00002	.02464	.03604	-,04526
		RUN	NO. 107/ G	RN/L =	5.32 GRAD	IENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CL,M.	CY	CYN	CBL	CAF	CAB	a.	6 0	L/0
4.859	21.420	.48740	-,04940	~,00940	.00230	.00190	.05740	.00220	.43280	.23150	1.66890
4.959	23,350	.55340	05440	~,01070	.00280	.00210	.05690	.00270	.48540	.27160	1,78710
4.959	25.420	.62620	06560	01500	.00230	.00230	.05730	.00280	.54090	.32060	1.68720
4,959	27,490	.70220	07260	-,01430	.00200	,00280	.05690	.00310	.59660	.37470	1.59200
4,959	29.530	.78080	08040	01500	.00220	,00340	.05690	.00300	.65120	.43440	1,49890
4.959	31,590	.06260	-,09300	01910	.00230	.00370	.05770	.00320	.70450	.50100	1.40610
4,959	33.660	.9456D	10420	02140	.00280	.00370	.05870	.00550	.75440	.57310	1.31640
4.959	35,700	1.02820	-,11470	02430	.00330	.00370	.05910	.00530	.80040	.64810	1.23500
4,959	37,810	1.11620	12390	02500	.00360	.0039G	.05900	.00320	.84560	.73090	1.15680
4.959	39,840	1.19670	13510	-,02730	.00413	.00480	.05910	.00320	.88240	.61350	1.08470
4.959	41,600	1.27960	14620	03080	.00390	,00410	.05840	.00310	.91490	.89650	1.02040

.00009

.00011

.00011

.00004

.02404

.03285

-.04229

.00350

.00006

-,01442

M555 (FAS) MAR ATP ORB (BICIDIFINI) (MEL) (VIKIRI)

									(87436	(03 4	O4 45)		
	REFEREN	CE DATA						PARAMETRIC DATA					
SREF «	7,4190 84			4530 IN.				ALPHA =	10,000	CONFIG =	3.000		
LREF .	2,1020 IN		•	D000 IN.				RUDDER =	.000	RUDFLR =	40.000		
BREF :	4.0300 IN	. ZHRF	• • •	0000 IN.				ELEVTR =	.000	CEDELY =	coo.		
SCALE =	.9040							IBDELV =	000.	AILRON =	.000		
		•						CBDAIL =	.000	IBOAIL =	.000		
		RUN	NO. 179/	D RN/L =	4.97 GR	ADIENT INTER	RVAL = -5.0	0/ 5.0 0					
MACH	BETA	CH CH	CLH.	CY	CYN	CBL	CAF	CAB	Q.	o	L/0		
.996	-10,070	.46960	00620	.15740	01090	.02170	.01880	.03010	.47670	,11310	4.21460		
.996	-6,150	.49650	-,00360	.12080	00920	.01930	.02070	.02950	.48310	.11630	4.15240		
.596	-6.110	.50650	00540	.06500	00720	.01560	.02010	.02870	.49500	.11020	4,18790		
.596	-4.050	.91570	00140	.05170	00510	.01210	.01900	.02870	.50230	.11860	4.23420		
,596	-2.010	.51940	00000	.01800	00160	.00820	.01730	.02930	.50610	.11770	4.29880		
.596	.010	.52790	.00260	01300	.00020	.00520	.01580	.03060	.51480	.11800	4.36110		
.596	2.040	.53210	.00500	03970	,00230	.00160	.01500	.03130	.51900	.11810	4.39380		
,.596	4.060	.53360	.00260	07490	.00520	00240	.01150	.03370	.52140	.11500	4,53260		
.596	6.130	.54000	.00410	10630	.00870	-,00600	.01340	.03210	.52710	.11820	4,45890		
.5/16	8,150	,54110	.00060	14190	.01170	-,00950	.01300	.03200	.52820	.11800	4,47640		
,596	10,110	.54250	.00010	17550	.01340	01290	.01160	.05390	.52990	.11680	4.53460		
.596	.010	.52630	.90376	01300	.00040	.00450	.01570	.03120	.51320	.11760	4.36280		
	GRADIENT	.00241	.00061	01531	.00121	00175	00085	.00059	.00252	-,00034	.03407		
		RUN	NO. 168/ (RN/L =	6,70 GR	DIENT INTER	VAL = -5.04	0/ 5.00					
MACH	BETA	CN	CLM	CY	CYN	CBL.	CAF	CAB	a.	CD.	L/D		
1.200	-10.350	.62660	07760	.15180	00160	.02720	.07660	.04440	.59720	.20440	2,92100		
1.200	-6.340	.64220	~.07520	.11460	00150	.02490	.07760	.04370	.61210	.20900	2.92800		
1.200	-6.230	.65530	07270	.07720	00130	.02010	.07890	.04280	.62460	.21350	2.92530		
1.200	-4.120	.66720	07350	.04120	.00050	.01420	05080.	.04160	.63580	.21750	2.92310		
1.200	-2.040	.67520	-,07070	.00800	.00300	00800.	.08120	.04190	.64340	.22040	2.91840		
1.200	.050	.68270	07110	~.02150	.00540	.00270	.08210	.04200	.65050	.22300	2.91590		
1,200	2.110	.69200	07146	~.64970	.90400	00246	.G6150	.04280	.65960	.22460	2.93640		
1,200	4,170	.69510	07250	07940	.00560	00800	.06050	.04220	.66280	.22440	2.95310		
1,200	6,290	.70020	07410	11290	.00740	01450	.07880	.04510	.66810	.22390	2,98400		
1.200	8.360	.69940	07400	14720	.00800	02060	.07920	.04570	.66730	.22400	2.97830		
1,200	10,410	.69360	07580	18050	.00700	02500	.07880	.04640	.66170	.22550	2.97700		
1.200	.040	.68300	06950	02260	.00340	.00210	.06260	.04110	.65060	.22370	2.90800		

.00054

-.00264

.00004

.00010

.00339

.00087

10,050

GRADIENT

.18220

.00079

-,02190

.00014

-.10760

-.01023

-,00410

-.00029

-.00780

-.00102

.06170

.00006

.00360

.00008

.16750

.00076

.09460

.00020

1.77090

.00425

MSSS (FAS) WAR ATF GRB (BICIDIFINE) (MEI) (VIKIRI)

(R76325) (03 NOV 72)

	REFERENC	E DATA			PARAMETRIC DATA						
SACT .	7,4190 \$0.	IN, WARP	* 5,4	530 TH.				ALPHA =	10.000	CONFIG =	3,000
LREP .	2,1020 IN,	THRP	· * .0	000 IN.				RUDDER *	.000	RUDFLR =	40.000
BREF .	4,0300 IN,	ZHRP	·	1000 IN.				ELEVIR =	,000	CEDELY ×	.000
SCALE =	.0040							IBDELY =	.000	AILRON =	.000
								OBDATL #	.000	IBDAIL =	.000
		RUN	NO. 113/ 0	RN/L =	4,14 GR/	WIENT INTER	VAL = -5.0	5,00			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	CO.	L/D
2.995	-10,150	.26460	-,05670	.13300	.00420	.08860	.06740	.01340	,24720	.11630	2,12470
2,990	-0.200	.27000	03710	.10420	05500.	.00700	.06660	.01340	.25250	.11660	2.16480
8.990	-6,130	.27320	03560	.07550	.00200	.00610	.06640	.01330	.25560	,11700	2,18470
2.990	-4.080	.27740	03500	.04610	.00120	.00420	.D6640	.01310	.25980	.11780	2.20520
2.000	-2,040	.26090	03460	06150.	.00090	.00260	.06646	.01310	.26310	.11850	2,22040
8 • 9 9 0	.000	.26030	03370	00630	.00150	.00046	.08880.	.01300	,26250	.11860	2.21310
8.990	2,040	.26270	03230	03320	.00190	00170	.06740	.01300	.26470	.11980	2.2094B
2.990	4.070	.26340	-,03460	06050	.00150	00380	.06740	.01290	.26550	.12000	2,21250
E.990	6,160	.26290	-,93460	-,08780	.000060	00560	.06770	.01290	.26490	.12020	2,20290
2.990	8,210	.28040	03400	11520	00060	00720	.06810	.01320	.26240	.12018	2,18440
2.99 0	10,160	.27960	05430	14580	00190	00880	.06850	.01350	.26150	.12030	2,17280
	GRADIENT	.00068	.00016	01336	.00008	-,00100	.00015	00002	.00064	.00028	.00018
		RLN I	NO. 114/ G	RN/L =	4.87 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA.	CN	GLM .	CY	CYN	CBL.	CAF	CAB	ar.	6	L/D
4,959	-10,010	.16980	-,02360	.10110	.90600	.00770	.06110	.00300	.15540	.09170	1.69530
4,959	-0,100	.17400	02520	.07950	.00460	.00670	.05890	.90320	.15990	.09030	1.77130
4.959	~6. 060	.17950	02630	.05610	.00340	.00560	.05830	00190	.16550	.09070	1,82490
4.959	-4.040	.18066	02620	.03630	.00200	.00450	.05560	.00260	.16710	.08830	1.69190
4.959	-2,020	.18700	-,02690	.01690	.00160	.00250	.05390	.00280	,17370	.08780	1,97790
4.959	.000	.16690	02670	00550	.00140	.00020	.05360	.00290	.17570	.08750	1.98350
4.959	2.040	.16910	02570	02350	.00010	00160	.05380	.00300	.17580	.08800	1,99610
4.959	4,040	.18750	-,02540	04490	00020	~.00380	.05630	.00350	.17370	09020	1.92560
4,959	6.100	.18650	02560	-,06690	00140	00560	.05760	.00330	.17250	.09150	1.88380
4,959	8,110	.18400	02530	08770	00280	00690	.05940	.00350	.16970	.09260	1.83110
4.959	10.050	.18220	- D219D	- 10200	- 00410	- 20400	Ge t en	00000			

MSSS (FAS) MAR ATP CRB (BICIDIFINI) (MIEI) (VIKIRI)

(R76326) (03 HOV 72)

REFERENCE DATA

.000123 _ -.00011

~.01050

-.00163

-.00139

.00001

-.00006

.00113

.00048

.00057

PARAMETRIC DATA

					PARAPEIRIC DATA						
WEF .	7,4190 80	. IN. 104R	3.4	530 IN.				ALPHA =	20.000	CONFIG =	9 600
LREF &	8,1020 IN	. YMRI		1000 IN.				RUDDER =	.000	RUDFLR =	3.000
BREF =	4.0300 IN	. 214RI		1000 th.				ELEVIR =	.000	OBDELY =	40,000 ,000
BCALE =	.0040		•					IBOELY =	.000	AILRON =	.000
								OBDAIL =	.000	IBDAIL =	.000
										ioonic -	.000
		RUN	NO. 167/ 0	RN/L =	4.97 GR	MOTENT INTER	RVAL = -5.0	0/ 5.0G			
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	œ	L/D
.595	-10,070	.87710	01460	.14330	00660	.01230	.00190	,04360	,81390	.32660	2,49020
.595	-4,150	.08150	-,01000	.11150	00530	05800.	.00290	.04630	.81760	.32950	
.595	-6.110	.00500	00660	08 67D .	00450	.00430	.00450	.04630	.81750	.33110	2.46660
.595	-4,040	.86450	~.00510	.03970	00170	.00000	.00320	.04990	.82030	.33090	2.47830
.593	-2.010	.88140	~.00010	.00530	.00150	00400	.00430	.05180	.81700	.33080	2.46950
.595	.080	.87510	.00660	02590	.00420	00520	.00400	.05500	.81120	.32820	2.47130
.593	2.050	.67310	.00850	05210	.00580	00560	.00410	.05500	.80940	.32750	2.47090
.595	4,060	.66620	.00840	08160	.00740	00570	.00260	.05370	.00540	,32430	2,48330
.695	9,140	.07090	.00490	11400	.00860	00820	.00410	.04980	.80730	.32660	2,47150
.695	0,170	.88480	.00190	15320	.00950	00820	,00340	.04570	.82040	.33140	2.47560
.595	10,160	.90320	00110	-,18920	.00920	00640	00010	.04410	.83870	.33510	2.50300
.595	.020	.87150	.00670	02670	.00410	00490	.00430	.05460	.80770	.32710	2.46910
	GRADIENT	00202	.00175	01481	.00111	~,00064	00007	.00053	00185	00081	.00056
		RUN	NO. 112/ 0	RN/L =	4.15 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
Mdan								-, 5,10			
MACH 2.990	BETA	ON	CLM CAN	CY	CYN	CBL	CAF	CAB	CL.	Ф	LO
2.990	-10,130 -6,200	.61310	06940	.10630	.01330	.01690	.05820	.01370	.54900	,279 10	1.96690
2.990	-6,130	.62020 .62710	07180	.08100	,01210	.01350	.05650	.01390	.55620	.28020	1.98460
2.990	-4.060	.63050	~,07560	.05410	.01050	.00990	.05520	.01420	.56300	.28150	1,99970
2,990	-2.050	.63260	07490	.02850	.00850	.00680	.05460	.01420	.56640	.28230	2.00620
2.990	.010	.63590	07430	.00540	.00560	.00390	.05490	.01390	.56840	.28340	2,00510
2,990	2.060	.63620	07400 07440	01490	.00240	.00100	.05420	.01360	.57150	.28390	2.01260
2.095	4.110	.64040		03590	00140	00170	.05460	.01350	.57350	.28530	2.01020
2,990	6.220	.64090	07600 07580	-,05830	00470	00460	.05490	.01380	.57540	.28630	2.00950
2.990	0.230	.64110	07300	08198	00730	00800	.05520	.01400	.57580	.28680	2.00710
2.990	10,180	.63730	07050	10690 13280	00910	01160	.05660	.01420	.57550	.28820	1.99620
2.230	GRADIENT	.00123	00011	13280 01050	01060	01520	.05820	.01410	.57130	.28830	1.98140
	411140 2001			01030	00163	~.00139	00004	- Oncore	66449		

-,00023

-,00767

-.00141

-.00128

-.00003

.00002

.00115

.00042

.00133

GRADIENT

MSSS (FAS) MAR ATP ORB (BICIDIFINI) (MEI) (VIKIBI)

				MAD ON WAS MIN ONE (BICIDIAINI) (MEI) (AIKIEI)						(R76326) (03 NOV 72)			
	REFERENCE	DATA		•						PARAMETRIC DATA			
-	7.4190 89.1	H. WRP	5.4	550 IN.				ALPHA =	20,000	CONFIG #	3.000		
LREF =	E,1020 IN,	YHRP		000 IN.				RUDOER =	.000	RUDFLR #	40,000		
BREF .	4,0300 IN.	ZMRP		000 IN.				ELEVTR =	.000	CBDELY #	.000		
SCALE =	.0040		•					180ELV =	.000	ATLEON :	.000		
								GBOAIL *	.000	IBDAIL =	.000		
								COUNTY -	.000	IDONIL -	.000		
	•	RUN	NO, 111/ 0	RN/L =	4.89 GR	DIENT INTER	VAL = -5.1	00, \$.00		•			
MACH	0ETA	CH	CL.H	CY	CYN	CBL	CAF	CAB	a.	6 0	L/0		
4.959	-10,020	.46540	05170	.07460	.01230	.01250	.05640	.00250	.43240	.22760	1,89980		
4,959	-6,100	.49300	05960	.05650	.01100	.01050	.05320	.00300	.44060	.22740	1.93710		
4,959	-6.050	.49910	09400	.03660	00e00.	.00820	.05070	.00310	.44730	.22730	1,96780		
4.959	-4.030	.90320	05340	.01980	.00690	.00800	.04880	.00340	.45180	.22680	1.99170		
4.959	-2.010	.80740	05560	.50230	.00460	.00530	.04690	.00340	.45630	.22680	2,01150		
4,959	.000	.81010	05420	+.01170	.00200	.00000	.04730	.00340	45870	.22820	2,00990		
4,959	2.050	.91270	05640	02750	00150	00170	.0473b	.00340	.46100	.22910	2,01160		
4.959	4,050	.91300	05540	04280	00430	00440	.04810	.00360	.46110	0.000	2.00500		
4.959	6.110	.51090	09480	06140	00660	00710	.05020	.00360	.45830				
4,959	0.110	.50930	98210	07830	00820	00970	.05280	.00380		.23120	1.98220		
4.959	10,060	.80720	05220	09800	01020	01200	.05498		.45590	.23300	1,95650		
~,			-,05550	45646	-,0102,0	• or E 00	.uo4au	.00570	.45320	.23420	1.93460		

MSSS (FAS) MAR ATP CRB (BICIDIFINE) (MEE) (VIKIRE)

(R76327)

								•			D4 45)	
	REFERE	HCE DATA						PARAMETRIC DAYA				
sater =	7.4190 8			1550 IN.				ALPHA =	30.000	CONFIG *	3.000	
LREF =	2.1020 II	-	•	1000 IN.				RUDDER =	.000	RUDFLR =	40,000	
BREF +	4,0300 (N, ZMR	P =	1000 IN.				ELEVTR =	.000	OBDELV =	.000	
SCALE =	.0040							IBDELV =	.000	ATLRON =	.000	
								OBDAIL =	.000	18DAIL =	.000	
	* -	RUN	NO. 166/ 0	RN/L =	4.96 GR	ADIENT INTER	RVAL = -5.0	00, 5,00				
MACH	BETA	CN	CJ.,M	CY	CYN	CBL	CAF	CAB	a.	69	L/0	
.594	-10.090	1,10870	03560	.04710	.03200	.01790	02210	.07040	.95020	.57160	1.66220	
,594	-0.150	1,14580	-,04010	02920	.02640	.01510	02200	.06970	.98120	.59210	1,65710	
,594	-6.110	1,17070	03490	.00870	.02430	.01210	01790	.06850	.99980	.60930	1,64070	
,594	-4,080	1.16630	-,02640	00450	.02560	-,00110	01280	.06890	.99320	.61140	1.62440	
.594	-2.050	1,16440	01960	01360	.01990	-,00700	01030	0e0 r0.	.99030	.61240	1.61690	
.594	.000	1.16210	-,01040	03320	.01080	00470	-,00920	.07330	.98780	.61230	1,61320	
,594	2,070	1,16050	-,00810	-,05470	ae000.	00130	00970	.07460	.98650	.61100	1.61450	
.594	4,100	1,15850	-,01320	07340	-,00570	-,00120	01090	.07270	.98560	.60900	1.61630	
.594	6,190	1,17050	02390	09610	01110	00210	01960	.07500	1,00040	.60809	1.64520	
.594	0.190	1.16670	03260	10750	01390	00780	02670	.07750	1,00280	.60080	1.66890	
.594	10,120	1.17110	03710	11670	01650	01320	03070	.07870	1.00710	.59850	1.66250	
, 594	.000.	1.16150	-,01020	03400	.01080	00530	00870	.07330	.98690	.61240	1.61150	
	GRADIENT	-,00096	.00186	-,00873	00399	,00027	.00021	.00055	00093	00030	00071	
		RUN	NO. 109/0	RN/L =	4.16 GR	DIENT INTER	VAL ≈ -5.0	0/ 5.00				
MACH	BETA	CN CN	CLM	CY	CYN	CBL	CAF	CAB	a.	6 0	L/D	
2,990	-10.110	1.02150	11650	.08920	.01550	.02460	.95060	.01390	.63740	.58720	1,42590	
2,998	-8.180	1,05070	11940	.06600	.01510	.02070	.04890	.01410	.84600	.59080	1.45170	
8,990	-6,110	1.03860	-,12210	.04210	.01060	.01640	.04750	.01420	.85330	.59390	1.43650	
2,990	-4,040	1,04400	12640	.01950	.00780	.01220	.04640	.01420	.85850	.59600	1.44040	
2.990	-2,010	1.04700	12660	.00020	.00400	.00810	.04570	.01410	.86130	.59700	1.44250	
2,990	.020	1.04680	-,12740	~,02090	.00160	.00290	.04490	.01400	.86320	.59730	1.44510	
2,990	0.090	1,05310	12640	-,04750	.00100	-,00320	.04530	.01390	.86660	.60010	1.44400	
2.990	4.120	1.05440	12620	06910	00140	00860	.04630	.01400	.86720	.60160	1.44130	
2,995	6.210	1.05540	-,12470	08950	00510	01330	.04760	.01410	.86730	.60330	1.43740	
2.990	●,230	1.05350	12100	11050	00820	01750	.04800	.01430	.86540	.60270	1.43590	
2.990	10.160	1.04920	1188D	13330	01080	02170	.04890	.01440	.86130	.60110	1,43270	
	GRADIENT	.00132	.00003	01101	00105	00259	00003	00003	.00111	.00070	.00016	

MSSS (FAS) HAR ATP CRB (BICIDIFINI) GHEI) (VIKIRI)

(R76327) (03 NOV 72)

	REFERENCE	E DATA		•			PARAMETRIC DATA						
BALF .	7.4190 89.1	IH. WARP		4530 IN.				ALPHA =	30,000	CONFIG =	3,000		
LREF =	2.1020 IM.	YHRF	•	9000 IN.				RUDDER =	.000	RUDFLR =	40,000		
erep =	4,0500 IN.	ZHRP	•	9000 IN.				ELEVIR *	.000	CEDELY =	.000		
SCALE =	.9940							TROELY =	.000	AILRON =	.000		
								CBOATL =	.000	IBDAIL =	.000		
•		RUH	NO. 119/	O RNAL =	4.91 GRA	DIENT INTER	VAL = -5.0	00, 8,00					
MACH	BETA	CN	CLM	CY	CYN	CBL	CAF	CAB	CL.	60	L/D		
4,959	-10,010	.67460	09150	.05830	.01340	.02070	.05560	.00250	.71570	.50570	1.41520		
4,959	-0.080	.86150	09370	.04150	.01160	.01710	.05370	.00280	.72260	,50770	1.42310		
4.959	-6,040	.09050	09770	.02550	.00900	.01340	.05200	.00300	.73110	.51110	1.43040		
4,959	-4,000	. 89670	~.10060	.00610	.00690	.00950	.05070	.00320	.73710	.51320	1.43610		
4,959	-2,000	.90550	-,09960	00750	.00440	.00610	.04950	.00320	.74230	.51520	1.44070		
4.959	.010	.90270	10190	02360	.00160	.00230	.04650	.00320	.74330	.51460	1,44440		
4.959	2.050	.90580	10030	03700	-,00070	-,00240	.04860	.00320	.74580	.51630	1,44440		
4.959	4,050	.90560	09730	04990	-,90320	00630	,04630	.00320	.74580	.91600	1.44530		
4,959	6.110	.90430	09670	06500	~.00550	01050	.05000	.00330	.74390	,51670	1,43950		
4.959	8,120	.90280	09770	08350	00790	01450	.05170	.00330	.74160	,51740	1,43340		
4.959	10,060	.90020	09390	0 9950	00970	-,01790	.05340	.00350	.73850	.51740	1,42710		
	TIGITARE	.00106	.00029	00703	00126	-,00199	00028	00000	.00104	££000.	.00110		

.00126

1.19774

MSSS (FAS) NAR ATP CRB (B1C1D1F1M1) (WIE1) (VIKIR1)

							-E-1) (VIKIKI	,	(8763)	E#) (03 h	(ST VOI
	REFEREN	HCE DATA.							PARAMETRIC	DATA	
BREF .	7.4190 80		P = 3,	4530 IN.				BETA =	.000	CONFIG =	3.000
LREF .	2.1020 ti	-	•	0000 IN,				RUDDER =	15.000	RUDPLR =	10.000
BREF .	4,0300 [1	ч. гия	P = .	0000 IN.				ELEVTR =	.000	CODELY =	.000
SCALE =	,6040							180ELY =	.000	AILRON =	.000
								CBDAIL =	.000	IBOAIL =	.000
		RUN	NO. 157/	D RN/L =	4.96 GRA	DIENT INTE	RVAL = -5.	00/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	Q.	c b	
.596	.670	03090	.03150	.07690	02770	.01450	.03430	.02710	03130	.03400	L/0
.598	2.670	.05540	.02700	.07600	~.0269O	.01510	.03280	.02690	.05380	.03540	92130
.595	4.770	.15080	.02010	.07310	02580	.01490	.02850	.02610	.14790	.04100	1.52070
.598	6.690	.25140	.01120	.07140	02530	.01460	.02280	.02500	.24690	.05280	3.60650
.598	9,010	.36870	0019G	.06870	02510	.01510	.01670	.02600	.36150	.07430	4.66870
.596	11,110	.47360	01300	.06460	02480	.01510	.01390	.02680	.46200	.10500	4.86240
.98	15.220	.58210	02440	.06260	02450	.01370	.00950	.02970	.56450	.14250	3.95980
.508	15,290	.66530	02910	.05950	~.02490	.01360	.00870	.03180	.63940	.16390	3.47530
.596	17.440	.75990	02960	.05910	02560	01430	.00600	.03730	.72320	.23350	3.09640
.596	19,490	.65020	02920	.06110	02720	.01290	.00440	.04310	.78110	,28130	2.77640
.578	21,490	.88260	-,02700	,06040	02730	.01020	.00640	.04710	.81900	.32950	2.4854D
.596	11,120	.47470	-,01160	.06420	-,02430	.01460	.01350	.02730	.46320	.10480	4.41760
	GRADIENT	.04433	~,00278	-,00093	.90046	.00010	00142	00025	.04372	.00172	1,10342
		RUN	NO. 158/ 0	RN/L =	6.28 GRA	DIENT INTER	VAL = -5.0	00/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	Q.	GC C	L/O
.903	.610	09080	.06510	.07410	02650	.01270	.04130	.03250	09130	.04030	-2.26170
.903	2.700	.00990	.06050	.06730	02500	.01320	.04090	.03130	.00790	.04130	.19290
.903	4,940	,13730	.04570	.06658	02440	.01300	.03400	.03120	.13360	.04570	2,92340
.903	7.160	.26600	.02690	.06140	02400	.01330	.03190	.03110	.26190	.96510	4.02200
.903	9,360 11,570	.37960	.01800	.05770	~.02330	.01400	.03370	.05196	.36910	.09500	5.88420
.903	13.758	.49970	.00320	.05030	02190	.01520	.05400	.03590	.48270	.13360	3.61200
.905		.61780	01450	.04560	~.02150	.01730	.03370	.03880	.59200	.17970	3,29400
.903	15.930	.71890	02280	.04000	02110	.01690	.03310	.04540	.66220	.22920	2.97580
.903	18,160	.82320	02270	.04500	02590	.01340	.03690	.05380	.77060	.29160	2,64070
.903	20,260 22,340	. 56950	00990	.05260	02550	.00490	.03300	.06220	.80410	.33240	2.41870
.903	11.560	.93560	00290	.04750	02460	.00890	.03740	.06470	.85110	39030	2.18080
	GRADIENT	.50020 .05 273	-,00020	.05350	02230	.01510	.03210	.03480	.48360	.13170	3.67020
		.45275	00451	00174	.00048	.00007	~.00170	00030	.05204	.00126	1.19774

11.550

GRADIENT

.41530

.03868

-.05960

-,00649

.02760

-.00127

-.00990

.00039

.00670

-,00029

.07240

-.00039

.02580

.00010

.39240

.03732

.15420

.00171

2.54440

.46532

MSSS (FAS) NAR ATP ORB (BICIDIFINE) (MEE) (VIKERE)

(R76326) (03 HOV 72)

								-	******	, ,	.,
	REFERE	NCE DATA							PARAMETRI	C DATA	
SALT S	7,4190 \$4		P = 3,4	930 IN.				BETA =	.000	CONFIG =	3.000
LREF =	2.102G (I		· -	000 IN.				RUDDER *	15.000	RUDFLR =	10,000
BREF 4	4,0300 (1	4. ZMRI	P = ,0	000 IN.				ELEVTR =	.000	CBDELY =	.000
SCALE .	.0040			•			•	180ELV =	.000	AILRON =	.000
-								CEDAIL =	.000	IBDAIL #	.000
		RUN	NO. 159/ 0	RN/L =	6.69 GRA	DIENT INTE	RVAL = -5.	00, 5,00			
MACH	ALPHA	CN	CLM	CY	CYN.	CB/L	CAF	CAB	Q.	66	L/D
1,196	.770	01630	.06440	.06250	02430	.01320	.07440	.04700	01930	.07420	-,26110
1,196	2.910	.11220	.03370	OS820.	~.02510	.01370	.07400	.04680	.10830	.07960	1.35950
1,196	5,170	.25360	00200	.05430	02150	.01320	.07400	.04580	,24610	00000	2,54710
1,196	7,450	.36760	03190	.04660	-,02030	.01300	.07520	.04250	.37460	.12480	2,99940
1.196	9,700	.51630	-,05710	.04380	01900	,01250	.07480	.04300	.49630	.16070	3.08730
1,196	11,960	.64790	08130	,03820	01620	.01150	.07560	.04300	.61610	.20630	2.96700
1,196	14,210	.77400	-,10020	,03410	01770	.01150	,07610	.04560	.73160	.26390	2.77230
1,196	16,420	.87370	-,10520	.02790	-,01590	.01450	.07560	.04940	.81660	.31960	2,55440
1,196	18,710	.97410	10e20	05950.	01690	.01140	.07590	.05540	.89820	.38460	2.33550
1,196	20.920	1.08190	11990	02850.	01940	.01140	.07400	.05680	.98410	.45560	2.16000
1,196	83,00 0	1.14290	11490	.02430	01770	.01040	.06970	.05960	1,02480	.51980	2,00600
1,196	11.970	.45270	08160	.03790	01830	.01180	.07560	.04300	.62280	.20940	2.97430
	GRADIENT	.06096	01435	00201	.00056	.00023	~,00019	00009	.05963	.00252	.75729
		RUN	NO. 146/ 0	RN/L =	6.83 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	C)H	CY	CYN	CBL	CAF	CAB	a.	6	L/D
1,956	.750	.01520	.00490	.04200	01440	.00770	.07570	.02540	.01420	.07590	.18770
1.956	2.600	.09450	00840	.03940	01360	.00710	.07490	.02560	.09070	.07940	1.14160
1,956	5,020	.18060	02580	.03600	01270	.00720	.07550	.02560	.17330	.09110	1,90260
1.956	7,200	.26160	03760	.05310	01160	.00710	.07470	.02660	.25020	.10690	2,33910
1.956	9,400	,34520	-,05130	.03090	-,01100	.00720	.07450	.02670	.32840	,12990	2,52760
1,956	11,570	.42320	-,06320	.02830	01000	.00700	.07350	.02590	.39980	15690	2.54740
1.956	13,760	.50120	-,07450	.02550	00960	.00730	.07190	.02600	.46970	.18910	2.48350
1,956	15,920	.97820	-,06290	.92310	00960	.00780	.07010	.02650	.53680	.22610	2.37350
1.956	18,150	.65960	-:06900	.01930	00980	.00810	.37030	27560	.51160	.55740	.91780
1.956	20.310	.73010	09380	.01550	00850	.00860	.06510	.02630	.66210	.31450	2,10480
1,936	E2.430	.80940	-,10200	.01160	00720	.00990	.96210	.02700	.72450	.36630	1.97770
1.956	11.550	.41530	05960	02760	- 00000	00670	07940	00200	700.00		

GRADIENT

.01946

-.00164

-.00089

-.000002

MSSS (FAS) MAR ATP CRB (BICIDIFIMI) (WIEI) (VIKIRI)

(RT6326) (03 NOV 72)

											· - ·
	REFEREN	ATAG 330							PARAMETRIC	DATA	
ares i	7.4190 80	3. IN. 354RI		4530 IN.				BETA =			_
LREF	2.1020 ()	I. YMRI	P = .	0000 IN.				RUDDER =	.000	CONFIG =	3.000
BREF .	4.0300 11	1. ZWRI	P = .	0000 IN.				ELEVER 2	15,000	RUDFLR *	10.000
SCALE =	.0040							180ELV =	.000	OBDELY =	.000
								OBOAIL =	.000	ATLRON =	.000
								CPONIE =	.000	IBOAIL =	.000
		RUN	NO. 129/	G MANL ≈	4.12 GRA	בשואו זאשום	RVAL = -5.0	00/ 5.0 0			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	Q.	60	
2.990	.670	00630	01030	.02460	00760	.00400	.07130	.01250	00910	.07120	L/0
2.990	2.610	.04120	01400	.02370	00720	.00400	.06990	.01280	.03800	.07180	12850
2.990	4.700	.09750	05810	.02260	00700	.00420	.08860	.01300	.09130	.07630	.52990
2.990	6.770	.15210	02360	.02060	00670	.00420	.06690	.01350	,14320	.08440	1,19600
2.990	0.650	.21240	02960	.01840	00650	.00420	.06520	.01330	.19980	.09710	1.69590
2.990	10.920	.27350	03500	.01730	00660	.00450	.06310	.01340	.25650	.11360	2.05770
2.990	15.020	.33810	03960	.01620	00620	.00490	.06190	.01330	.31550	.13650	2.25300
2.990	15,060	.40310	04670	.01360	00570	.00490	.05960	.01330	.37370	.16240	2.30990 08663.3
2.990	17,210	.47740	05560	.01000	~.00450	.00490	.05740	.01320	.43900	.19620	
2,990	19,280	.55120	06600	.00500	00500	.00450	.05510	.01350	.50210	.23400	2.23760 2.14510
2.990	21.270	.62400	-,07470	.00260	00220	.00430	.05450	.01270	.56170	.27720	2.02630
	GRADIENT	.02621	-,00196	00055	,00015	.00005	00067	.00012	.02492	.00128	.32653
		RUN	NO. 130/ (NVL =	4.85 GRAE	IENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	QLM	CY	CYN	CBL	CAF	CAB	a.	6 0	
4.959	.660	02990	01420	.01480	00350	.00250	,06410	.00260	~.03070	.06370	, L/O
4.959	2.570	.00850	01930	.01300	00370	.00240	.06100	.00290	.00580	.06130	48190
4,959	4,600	.04680	02070	.01130	00360	.00240	.05990	.00320	.04188	.06350	.09460
4.959	6,650	.08670	~.02060	.01120	-,00280	.00260	.05750	.00340	.07940	.06720	.65910
4.959	●.€80	.13330	02600	.00776	+.00250	.00250	.05430	.00330	.12360	.07380	1.18140
4.959	10.720	.16010	02920	.00930	00220	.00270	.05190	.00350	.16730		1.67320
4.959	12,760	.23470	03190	.00580	00198	.00300	.05030	.00360	.21780	.98450 .10100	1.97780
4.959	14,600	.28970	-,05360	.00580	-,00120	.00510	.04820	.00360	.26778	.12060	2,15580
4.959	16,890	.35230	03990	.00230	00040	.00280	.04690	.00370	.32340	.14730	2.21830
4.959	18,910	.41460	04630	.00000	.00010	.00290	.04620	.00360	.57720	.17820	2.19530
4.959	20.000	.48020	05440	00500	.00080	.00280	.04590	.00370	.43230	.21410	2.11700
	4D 4D 150 00								*****		2.01870

-.00003

-.00106

.00015

.01839

.21410

-.00004

2.01870

MSSS (FAS) MAR ATP CRB (B1C1D1F1H1) (MEL) (VIKIRI)

(R76329) (03 NOV 72)

	REFEREN	KE DATA				-			PARAMETRIC	DATA	
SREP .	7,4190 80		-•.	530 IN.				SETA =	.000	CONFIG *	3,000
LREF .	2,1020 IN	-	▼-	000 IN.				RUDDER =	15,000	RUDFLR =	10,000
BREF =	4,0300 IN	. ZMRF		000 IN.				ELEVIR =	.000	OBDELY *	.000
SCALE *	,0040							180ELV =	.000	AILRON =	.000
	â							OBDAIL =	.000	TBOATL *	.000
*1		RUN	NO. 156/ 0	RN/L =	4,95 GR	ADIENT INTER	RVAL = -5.0	0/ 5.00			
MACH	ALPHA	CH	CL.H	CY	CYN	C BL	CAF	CAB	C.F	O	L/D
.893	22,010	.07960	-,01790	.04220	+.05200	.00930	.00330	,04960	,61420	.33260	2,44640
.593	25,940	.0000	01190	.03830	02030	.01160	.00270	.05340	.82020	.36710	2,23400
.593	25.980	.94070	01200	.04930	-,02270	.01010	.00160	.05650	,84490	.41360	2,04240
.893	28,046	.98370	01710	.06870	02370	.00190	00050	.06190	.85840	.46210	1.87930
.893	\$0,110	1.05150	03140	.05980	01440	00050	~.00530	.06790	.91230	.52290	1.74470
.503	32,180	1,12760	03660	.04200	01180	.00440	00770	.07010	.95840	.59400	1.61330
.895	\$4,250	1,19540	03660	.02580	01310	.01260	-,01050	.07200	.99230	.66310	1.49650
.ee	36,340	1,27300	03610	.01960	-,01400	.01480	01520	.97500	1.03440	.74210	1,39390
.503	38,460	1,35060	-,84620	.01530	01438	.01290	02370	.07740	1.07230	.82140	1.80530
.593	40,500	1,41360	-,04\$60	.01260	01120	.00910	03140	.07750	1.09530	.89420	1.22480
.593	42,490	1.47660	-,94880	.01040	00880	.00690	04100	.06070	1,11790	G38 26.	1,15410
.993	32,200	1.13480	03600	,04470	01160	.00450	00800	.07050	.96450	.59600	1.61290
	GRADIENT	,05091	80184	00219	,00065	.00011	00207	.00152	.01638	.03161	-,06136
		RUN 4	NO. 155/ 0	RN/L =	6.27 CR	ADIENT INTER	VAL = -5.00	0/ 5.00			
MACH	ALPHA	CN CN	CL.M	CY	CAN	CBL	CAF	CAB	a.	Ф	L/O
.900	22.600	.91200	.00380	.05980	-,02040	,00920	.03330	.06230	.82780	.38410	2,15480
.900	24,860	.96890	00080	.03930	~.02 050	.01290	.03170	.06620	.88390	.44460	1,98790
.000	27.020	1.07580	01220	.03210	01790	.01430	.02860	.06880	,94530	.51420	1,63820
.900	29.140	1,15900	02190	.01730	01470	.01660	.02560	.06850	.99970	.98690	1,70310
.000	31.290	1.23630	01970	01040	-,01050	.02630	.02170	.0681G	1.04430	.66020	1.58170
.900	35,460	1,52500	-,02340	~.01980	009 90	.02910	.01870	.06930	1.09480	.74670	1,46620
.900	59,610	1,40230	02500	01600	01200	.02490	.00920	.07320	1,13470	.82410	1,37690
.900	37,690	1,46460	02080	-,00180	01380	.01350	-,00320	.07650	1.16090	.09300	1.30000
.900	\$9.660	1.52750	02760	.01090	00840	.00260	01220	.07670	1.17990	.97020	1,21610
.000	41.950	1,56430	02850	.00880	~.00500	.00170	02000	.07580	1.19160	1,04420	1,14126
.900	44.020	1.65370	-,08040	.00120	~.00300	.00170	02650	.07440	1.20740	1.13020	1.06820
.900	33,460	1.32250	02960	02180	00870	.02870	.01720	.06950	1.09380	.74350	1,47100
	GRADIENT	,03508	00141	00181	,00076	00055	00298	.00061	.01612	.03528	04991

MSSS (FAS) MAR ATP ORB (BECEDIFINE) (MEET) (VIKERE)

(03 NOV 72)

REFERENCE DATA

PARAMETRIC DATA

									PARAMETRIC	DATA	
eret =	7.4190 1		P = 3.4	530 IN.				SETA =	.000		
LREF =	2,1020 I	N. YHR	.0	900 IN.				RUDDER =	15,000	CONFIG =	3.000
BREF =	4,0300 1	N. ZHRI	٥, ۽ ح	000 IN.				ELEVTR =		RUDFLR =	10.000
SCALE =	.0040							180ELV =	.000	CBDELY =	.000
									.000	AILRON =	.000
							*	OBOAIL =	.000	IBDAIL =	.000
		RUN	NO. 126/ G	RN/L =	4.12 GRA	DIENT INTER	RVAL = -5.0	0/ 5.00		•	
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	αL		
8.990	21,610	.61750	-,07500	.00230	00210	.00430	.05200	.01380	.55400	.27770	L/D
2,990	23,770	.69050	06340	-,000060	00120	.00410	.05050	.01400	.61150		1.99470
2,990	25,890	.77210	09340	-,00470	00000.	.00390	.04860	.01430	.67330	.32460	1.88360
R.990	20,000	.65700	10300	~.00870	.00120	.00370	.04760	,01440	.73430	.36090	1.76740
2.990	30,100	.94020	11040	nee00	.00130	.00420	.04640	.01420	.79010	.44430	1.65250
2,490	32,200	1.02770	12020	01080	~.00010	.00560	.04570	.01420	.84520	.51170	1.54390
2,990	34,340	1,11990	12930	01170	00040	.00670	.04470	.01420	.89948	.58650	1.44100
2.990	36,420	1.20978	14130	01580	.00040	.00700	,04340	.01440	.94750	.66870	1.34490
2.990	36,590	1.30240	15340	-,02440	.00250	.00590	.04220	.01370	.99150	.75330	1.25760
2.990	40.660	1.36900	16190	-,02950	.00410	.00510	.04020	.01380	1,02740	. 84560	1.17260
2.990	42.660	1.46950	16940	05550	.00500	.00450	.03970	.01380	1.05360	.93570	1.09800
	GRADIENT	.04126	~.00460	00160	.00026	e000D.	00057	00001	.02447	1.02510	1.02760
								,,,,,,,	.02447	.03616	04653
		RUN	NO. 127/ 0	RN/L =	4.84 GRAD	DIENT INTER	VAL = -5.04	0/ 5.00			
MACH	ALPHA	CN CN	CLM	CY	CYN	CBL	CAF	CAB	a.	c o	
4.959	21.420	.49860	05180	00400	.00030	.00310	.04660	.00320	.44700		L/O
4.959	23.350	.56630	-,05930	00740	.00130	.00300	,04570	.00340	.50180	.22560	1,98160
4.959	25,410	.64010	06680	00980	.00110	.00320	.04630	.00360	.55830	.26650	1,88260
4.959	27,500	.72040	07550	01220	.00130	.00380	.04640	.00360		.31650	1.76380
4.959	29,540	.80060	08580	01510	.00180	.00390	.04750	.00360	.61750	.37390	1.65130
4.959	31,600	.88590	09600	01750	.00230	.00390	.04730	.00360	.67300	.43610	1.54330
4.959	33.680	.97360	10580	01810	.00280	.00420	.04770	.00360	.72960	.50460	1.44580
4.959	35,720	1.05600	11790	~.02330	.00300	.00420	.04750	.00360	.78360	.57970	1.35160
4.959	37,830	1.14690	12930	02620	.00360	.00430	.04750	.00340	.82950	.65520	2.26590
4.959	39,840	1.23010	14250	02910	.00380	.00430	.04720	.00340	.87670	.74100	1,18310
4.959	41.840	1.31390	15060	~.05040	.00420	.00460	.04600	.00330	.91420	.82440	1.10880
	GRADIENT	.04027	-,00496	00150	.00018	.00008	.00004	00000	.94800	.91090	1.04070
							, 0000	00000	.02499	.03381	~.04650

.901

.901

.901

.901

.901

.901

.901

.901

-4.090

-2,050

2,090

4,130

6,230

6.270

10.280

GRADIENT

.030

.030

-.08300

-.05960

-.05290

-.04610

-.03880

-.03210

-.02410

-,01850

-.05240

.00301

.06670

.06460

.06560

.06430

.06090

.05620

.05040

.04**99**G

.06530

.00001

.11950

.08140

.04790

.01490

-.02200.

-.06170

~.09790

-.13400

.04640

-.01700

-.03080

-.02660

-.02380

-,02110

-.01630

-.01130

-.00760

-.00550

-,02350

.00166

1 03 NOV 72)

(RT6330)

MS99 (FAS) MAR ATP CR8 (BICIDIFINI) (WIEI) (VIKIRI)

REFERENCE DATA									PARAMETRIC	DATA	
MC7 =	7.4190 \$			530 IN.				ALPHA =	.000	CONFIG =	3,000
LREP =	\$.1020 ft			000 IN.				RUDDER *	15.000	RUDFLR =	10.000
BREF .	4,0300 [1	H. ZHRP	■ .0	000 IN.				ELEVTR =	.000	OBDELY =	.000
SCALE *	.0040		•			•	•	180ELY =	.000	AILRON =	.000
								CEDAIL =	.000	IBOAIL =	.000
		RUN H	D. 165/ 0	RNVL =	4.99 GR	WIENT INTE	RVAL # -5.0	0/ 5.00			
MACH	BETA	CH	G.H	CY	CYN	CBL	CAF	CAB	a.	60	
.295	-10.070	-,02620	.02030	.19220	02500	.01050	.03170	.03020	02610		L/0
.599	-4,150	01310	.02240	.16730	02710	.01330	.03380	,02780	-,01300	.03180	62210
.579	-6,090	00930	.02270	.14810	03190	.01790	.03480	.02630	00920	.02590	38590
.599	-4.050	00790	.02470	.11720	03130	.01860	.03420	.02650	-,00780	.03490	26630
.599	-2,010	00730	D8850.	.08320	02620	.01790	.03420	.02700	00720	.03420	23000
.599	.010	C880 0. -	.03390	.05490	02540	.01730	,03310	.02820	00880	.03320	21210
.599	2.040	00320	.03530	.02640	02310	.01620	,63440	.02700	00310	.03320	~.26510
.599	4.060	.00158	.03220	→,00800	~.02030	.01520	.03280	.02740	.00150	.03260	~,09150
.599	6.140	.01040	.02690	04720	01600	.01550	.03010	.02740	.01050	.03000	.04830 .35020
.899	6,190	.01960	,0264Q	06190	01230	.01130	.02450	.03000	.01960	.02440	.80260
.599	10,110	.02170	.02130	11690	+,00970	.01.050	.02100	.03070	.02160	.02100	1.03680
.577	.010	00740	.05340	.05310	02540	.01700	.03440	.02700	00730	.05440	21400
	GRADIENT	.00113	.0010B	01516	.00134	-,00042	00013	.00009	.00112	00013	.05339
		RUN N	0. 164/ 0	RN/L =	6.30 GRA	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	BETA	CN CN	CLM	CY	CYN	CBL	CAF	CAB	α.	œ	L/D
.901	-10.240	~,08440	.05340	.20530	02640	.01070	.03950	,03520	08430	.03980	
,901	-8,260	07170	,05410	.17630	02850	.01340	.04000	.03330	07160	.04020	-2,11650 -1,77950
.901	-6,180	07140	.06120	.15180	05240	.01776	.04340	.03080	07130	.04368	-1,77950
										•	~1,03420

.01790

.01670

.01550

.01440

.01260

.01030

.00920

.00840

.01510

-,00063

.04310

.04370

.04120

.03940

.05676

.03190

.02760

.02440

.04040

-.00083

.02960

.02960

.03110

.03150

.03200

.03340

.03470

.03590

.03176

.00030

-,06290

-.05950

-.05260

-.04600

-.03880

-.03200

-.02410

-,01850

~.05230

.00300

.04330

.04390

.04130

.03950

.03680

.03200

.02760

.02450

.04050

-.00085

-1,45230

-1,35590

-1.27870

-1,16400

-1.05550

-1,00060

~.87220

-.75500

-1.29230

.030

GRADIENT

.03490

.00200

.00190

-.00074

MSSS (FAS) NAR ATT ORE (BICIDIFIHI) (MIEI) (VIKIRI)

(R76330) (03 HOV 72) REFERENCE DATA PARAMETRIC DATA SREF 7.4190 SQ.IH. WRP 3.4530 IN. ALPHA = .000 CONFIG E 3.000 LRET 2,1020 IN. THEP .9000 IN. RUDDER = 15,000 RUDFLR = 10,000 BRET 4,0300 IN. ZHRP .0000 IN. ELEVTR = .000 OBDELY = .000 SCALE & .0040 180ELY * .000 AILRON = .000 CEDATL # .000 IBDAIL = .000 RUN NO. 165/ Q RN/L = 6.71 GRADIENT INTERVAL = -5.00/ 5.00 MACH BETA ON CL,H CYN CY ŒL CAF CAB QL. CD LA 1.201 -10,300 -.04880 .05660 .21610 -.03070 .02440 .07190 .04730 -.04870 .07200 -.67600 1.201 -4.310 -.03250 .05650 .18190 -.03130 .02520 .07200 ,04790 -.03240 .07200 -.45020 1.201 -6.210 -.02060 .05760 .14170 -,02960 .02360 .07330 .04610 -.02050 .07330 -.28000 1.201 -4.100 -.00990 .05940 .10380 -,02630 .02080 .07440 .04610 ~.00990 .07440 -.13330 -2.040 1.201 -.00100 .06130 .06950 -.02380 .01770 .07410 .04680 -.00100 .07410 -.01450 1.201 .050 .00500 .06210 .03750 -.02200 .01500 .07300 .04760 .00500 .07300 .06940 .01040 1.201 2.130 .06110 .00430 -.ü1980 .01190 .07180 .04780 .01040 .07180 .14480 1.201 4.190 .01200 .05720 -,03360 -.01590 .00790 .06940 .04810 .01200 .06940 .17360 1.201 4.320 .01910 .05040 -.G7350 -.01130 .00360 .06580 .04910 .01910 .06580 .29110 1.201 6.380 .02130 .04410 -.11150 -.00630 000060 .06350 .04850 .02130 .06350 .33580 1.201 10,416 .02050 .05830 -.14940 -.00710 -,00120 .06110 .04860 .02050 .06110 .33640 1.201 .050 .00540 .06290 .03750 -.02230 .01480 .07300 .04750 .00530 .07300 .07360 GRADIENT .00266 -.00022 -.01638 .00119 -.00152 -.00059 .00024 .00266 -.00059 .03726 RUN NO. 147/ 0 RN/L = 6.86 GRADIENT INTERVAL = -5.00/ 5.00 MACH BETA CN CLM CY CYN CBL CAF CAB a. œ L/D 1.956 -10.430 -.00670 .00510 .19780 -.01520 .00840 .07760 .02740 -,00650 .07760 -.08450 .00478 1.956 -8,410 .00320 .16180 -.01600 .00930 .07760 .02660 .00340 .07760 .04430 1,956 -6.290 .01550 .00570 .12790 -.01740 .01010 .07870 .02570 .01560 .97860 .19920 1.956 -4,160 .02240 .00460 .09260 -.01650 .00980 .07700 .02580 .02250 .07700 .29240 1,956 -2,060 .03010 .00390 .05830 -.01520 .00920 .07750 .02570 .03020 .07750 .38990 1.956 .030 .03530 .00150 .02350 -.01310 .00610 .07690 .02550 .03540 .07690 .46030 1.956 2,140 .03810 .00050 -.01100 -.01070 .00680 .07500 .02570 .03810 .07500 .50860 1.956 4,220 .03940 -,00130 -,04620 -,00820 .02600 .00576 .07290 .03940 .07290 .54180 .05790 1.956 6,360 -.00450 -.08280 -.00650 .00470 .07050 .02640 .03800 .07050 .53910 1.956 8.460 .03550 -.00070 -.11870 -.00600 .00428 .06890 .02690 .03550 .06890 .51610 1.956 10,480 .02915 -.00910 -.15480

-,00660

~.01320

.00099

.02300

-.01655

.00430

.00810

-.00051

.06730

.07640

-.00051

.02740

.02560

.00002

.02920

.03498

.00199

.06730

,07640

-.00051

.43370

.45760

GRADIENT

.00306

-.00006

-.01451

.00061

-.00237

-.00065

.00015

.00311

3,78030

.02088

.00003

MSSS (PAS) HAR ATP ORB (BICIDIPINI) GHEI) (VIKIRI)

	moss (FAS) MAR ATP CRB (BICIDIPINI) (ME1) (VIKIRI)								(\$76331) (03 HOV 7		
REPERENC	E DATA							PARAMETRIC	: DATA		
-			3.4530 [N.				ALPHA =	10,000	CONFIG 2	3,000	
							RUDDER =	15,000		10,000	
	214R1	• •	.0000 IN.				ELEVIR =	.000		.000	
.9040							IBOELV =	.000		.000	
							OBDAIL =	.000	IBDAIL =	.000	
	RUN	NO. 162	O MILE	4.96 GR	ADIENT INTE	RYAL = -5.0	00/ 5.00				
BETA	CH	CLH.	CY	CYN	CBL	CAF	CAB	a	•	L/D	
	.49250	0140	08771,	02150	.02550	.01270				4,46740	
-6,140	.50480	-,0143	.19570	02440	.92570	.01270	.02680			4.47390	
-6,090	.51960	-,0174	.13100	0 2890	.02540	.01270	.02480			4.48700	
	.52780	0175	05501. 0	02920	.02330	.01140	.02470			4.53990	
=	.53090	-,0120	001100	02660	.02030	.01150	.02490			4.53620	
•	.53730	-,0095	0 .04260	~.0243 0	.01650	.01190	.02470			4,52240	
-	.54110		• • • • • • •	02220	.01290	.01100	.02620			4.56160	
-	.54630	-,0077	002150	01930	.00870	.00830	.02680			4.67110	
		-,0109	9 -,05770	01530	.00520	.00660	.02600	.54290		4,74770	
_		- '		01260	.00160	.00480	.02600	.54890		4,82710	
-		-	*****	~.01040	00200	.00170	.02740	.54910		4.96730	
-				-,02468	.01630	.01150	.02500	.52420		4,53740	
GRADIENT	.00236	.0012	401518	.00119	00180	00033	,00027	.00236	.00016	.01418	
•	RUN	NO. 161	O RNAL =	6,27 GR	ADIENT INTER	VAL = -5.0	0/ 5.00				
BETA	CN	GLM.	CY	CYN	CBL	CAF	CAB	a	CT.	L/O	
=	.55540	-,0297	0.19810	01970	.01450	.02920	.03640			3.63320	
	. 56250	0243	0 .16430	02290	,01970	0000	.03470			3,81660	
	.52920	0039	05131.	02200	.03030	.05190	.03540			3,71400	
	.54040			02320	.02790	.03300	.03370		-	3,69880	
		0014	.05960	02170	.02298	.03230	.03430			3.73110	
	.55410	0008	08080.	02080	.01830	.03060	.03540			3.77620	
=	.55900			01990	.01370	.02810	.03580	.54180		3.85230	
				01780	.00810	.02840	.03450	.55110	.14300	3.65270	
				01550	.00200	.02580	.03390	.55160	.14030	3,93050	
-			•	01520	-,00270	.02500	.03400	.55140		3.95430	
			2	01650	~.00890	.02250	.03490	.54690		4,02430	
.050	.55770	00080	03020	02120	.01780	.03060	.03580	.53990	.14280	3,78030	
	8:1020 IN. 4:0300 IN. 4:0300 IN. :0040 BETA -10.080 -4:140 -4:090 -4:030 -2:020 :020 :020 :020 :0:000 4:070 8:150 6:170 10.130 .010 GRADIENT	#.1020 IN, YMRI 4.0300 IN. 2001 .0040 RUN BETA CN -10.060 .49230 -6.140 .50480 -6.090 .51960 .020 .53730 #.090 .4110 4.070 .54630 6.190 .55460 6.190 .55600 .010 .53670 GRADIENT .00236 RUN BETA CN -10.260 .55270 .6.250 .55270 .050 .55270 .050 .55270 .050 .55270 .050 .55680 .250 .56680 6.330 .56620 10.320 .56630	### REPERENCE DATA 7,4190 84,1N, MARP = 8,1020 1N, YMRP = 4,0300 1N, ZMRP = 4,0300 1N, ZMRP = 8,0040 #################################	REPERCICE DATA 7.4190 84,1M, DURP = 3.4530 IM, 8.1020 IM, YMRP = .00000 IM, 4.0300 IM, ZMRP = .00000 IM, .0040 RUM NO. 162/ 0 RN/L = 8ETA	### PREMICE DATA 7.4190 \$4,1M, DARP = 3.4530 IM, 8.1020 IM, TARP = .0000 IM, 4.0300 IM, ZARP = .0000 IM, .0040 ###############################	### REPERENCE DATA 7.4190 \$0.1N. WARP = 3.4530 IN. 8.1020 IN. YARP = .0000 IN. 4.0300 IN. DARP = .0000 IN. .0040 ### RUN NO. 162/ 0 RN/L = 4.96 GRADIENT INTEL ### RUN NO. 162/ 0 RN/L = 4.96 GRADIENT INTEL ### RUN NO. 162/ 0 RN/L = 4.96 GRADIENT INTEL #### RUN NO. 162/ 0 RN/L = 4.96 GRADIENT INTEL #### RUN NO. 162/ 0 RN/L = 4.96 GRADIENT INTEL #### RUN NO. 162/ 0 RN/L = 4.96 GRADIENT INTEL #### RUN NO. 162/ 0 RN/L = 4.96 GRADIENT INTEL #### RUN NO. 162/ 0 RN/L = 4.96 GRADIENT INTEL #### RUN NO. 162/ 0 RN/L = 4.96 GRADIENT INTEL #### RUN NO. 162/ 0 RN/L = 4.96 GRADIENT INTEL #### RUN NO. 161/ 0 RN/L = 6.27 GRADIENT INTER #### RUN NO. 161/ 0 RN/L = 6.27 GRADIENT INTER #### RUN NO. 161/ 0 RN/L = 6.27 GRADIENT INTER #### RUN NO. 161/ 0 RN/L = 6.27 GRADIENT INTER #### RUN NO. 161/ 0 RN/L = 6.27 GRADIENT INTER #### RUN NO. 161/ 0 RN/L = 6.27 GRADIENT INTER #### RUN NO. 161/ 0 RN/L = 6.27 GRADIENT INTER #### RUN NO. 161/ 0 RN/L = 6.27 GRADIENT INTER #### RUN NO. 161/ 0 RN/L = 6.27 GRADIENT INTER ##### RUN NO. 161/ 0 RN/L = 6.27 GRADIENT INTER ##### RUN NO. 161/ 0 RN/L = 6.27 GRADIENT INTER ##### RUN NO. 161/ 0 RN/L = 6.27 GRADIENT INTER ###################################	### ### ##############################	### PRPEMENCE DATA 7.4190 80, IN, DORP = 3.4530 IN, 8.1020 IN, TWRP = .0000 IN, RDDCR = 10000 IN, 4.0300 IN, TWRP = .0000 IN, RDDCR = 10000 IN, 8.0000 IN, DORP = .0000 IN, RDDCR = 10000 IN, 8.0000 RDDCR = .0000 RDDCR = .00000 RDDCR = .000000 RDDCR = .00000 RDDCR = .000000 RDDCR = .0000	### REPERENCE DATA P.4190 89,1N, WARP = 3,4530 IN, 8,1020 IN, YARP = .0000 IN, 4,0300 IN, ZARP = .0000 IN,	### PARAMETRIC DATA 7.4190 84,1N, 198P = 3.4530 lN, 8.1020 lN, 198P = 0.0000 lN, 4.0300 lN, 198P = 0.0000 lN,	

MSSS (FAS) MAR ATP CRB (BICIDIFINE) (MEE) (VEKERE)

	REFERENC	E DATA							PARAMETRIC	DATA	
-	7,4190 60.	IN. 10-RP	5,4	550 tH.	•			ALPHA =	10,800	CONFIG =	3.000
LREF =	2,1020 IN.	YHRP	o. =	000 IN.				RUDDER =	15,000	RUDFLR =	10.000
BREF =	4,0300 IN,	. 214RP	· = .0	000 IN.				ELEVTR =	.000	OBDELV =	.000
SCALE .	.0040							180ELY =	.000	AILRON =	.000
								GBDAIL *	.000	IBOAIL =	.000
		RUN	NO. 160/ 0	-							
	•	N. W.		RN/L =	6.68 GR/	WIENT INTER	VAL = -5.0	0/ 5,00			
MACH	BETA	CM	CLM	CY	CYN	CBL	CAF	CAB	α	CD	L/D
1,100	-10.320	.63280	08450	.17810	01520	.03380	.07260	.04500	.60420	.20180	2.99330
1,100	-6.310	.64700	06430	,14500	01740	.03200	.07270	.04430	.61790	.20520	3.01140
1,199	-6,200	.65740	08350	.11150	01850	.02900	.07370	.04240	.62770	.20860	3,00890
1,199	-4,090	.67090	08500	.07830	01820	.02360	.07410	.04200	.64076	.21210	3.02080
1,199	-8.000	.66220	06220	.04770	01730	.01780	.07460	.04270	.65160	.21530	3.02560
1,199	.070	.69060	08280	.01880	-,01750	.01300	.07510	.04300	.65980	.21760	3.02860
1,109	2,150	.69670	08390	00820	01780	.00850	.07340	.04360	.66590	.21750	3.06100
1,199	4,210	.70590	C338D	03850	-,01660	.00290	.07140	.04310	.67530	.21760	3,10210
1,199	6.360	.70560	0893 0	07120	01530	~,00380	.06720	.04520	.67610	.21340	3.16710
1,199	8,410	.70510	09250	10590	01500	00930	.06490	.04630	.67590	.21100	3,20310
1,199	10.440	.70220	09620	13780	01600	01340	.06270	.04800	.67360	.20000	3.23770
1,199	.070	.69060	09200	.01640	01760	.01240	.07490	.04320	.65970	.21760	3,03140
	GRADIENT	.00407	00024	01395	.00013	00244	00052	.00015	.00402	.00064	.00953
		RUN (NO. 146/ 0	RN/L =	6.88 GRA	DIENT INTER	VAL = -5.00	5,00			
MACH	BETA	CN CN	CLM	CY	CYN	CBL.	CAF	CAB	a.	G	L/0
1.954	-10.420	.40410	05860	.16650	~,00490	.01430	.07190	.02760	.38160	.15130	2.52190
1,954	-8.400	.41310	05910	.13410	00630	.01360	.07170	.02620	.39040	.15300	2,55000
1,954	-6.260	.42900	06200	,10270	00890	.01300	.07210	.02560	.40580	.15690	2,56550
1,954	-4.150	.48410	06250	.07260	01020	.01150	.07170	.02600	.41080	.15770	2,60510
1,954	-2.050	.44110	06320	.04350	01080	.00960	.07210	.02590	,41750	.15950	2,61630
1,954	.040	.44870	06530	.01390	01070	.00750	.07250	.02660	.42460	.16160	2,62880
1.954	2,130	.44340	06380	01650	01030	.00510	.06980	.02710	.42030	.15770	2.66480
1,954	4.200	45640	06850	-,04610	00900	.00210	.06800	.02660	.43330	.15880	2.72780
1.954	6.350	.45390	06980	07740	00930	~.00020	.06560	.02650	.43130	.15580	2.76720
1.954	4.44 0	,45020	06970	10820	-,01100	-,00200	.06468	.02690	.42790	.15410	2,77700
1.954	10,490	.44490	~.07090	14170	01320	00360	.06310	.02820	.42310	.15140	2.79410
1.954	.040	.44450	06380	.01280	~.01060	.00740	.07240	.02660	.42080	.16050	2.62060
	GRADIENT	.00225	-,00060	01424	.00014	00113	00046	.00012	.00229	.00002	.01406

.902

22.320

11.560

GRADIENT

.91940

.49070

.05404

.00740

.01400

-,00523

.03790

.05130

-.00146

-.01890

-.02110

.00042

.00850

.01420

-.00009

.04030

.03940

-.00181

.06660

.04030

-.00030

.83510

.47290

.05323

.38650

.13700

.00101

2.16070

3.44990

1.07190

(R76532) (05 NOV 72)

MSSS (FAS) MAR ATP ORB (BICIDIFINI) (MEI) (VIKIRI)

											,
	REFEREN	HCE DATA				-			PARAMETRIC	DATA	
iner .	7.4190 20		* 3,4	530 IN.				BETA =	.000	CONFIG #	3,000
LREP =	2.1020 (1	H. YMRF	۰, ب	000 IN.				RUDDER =	15,000	RUDFLR =	40,000
BREF .	4.0300 1	4. ZHRF	.0	000 IN.				ELEVTR =	.000	OBDELY :	.000
SCALE =	,0040							INDELY =	.000	AILRON =	.000
								CEDAIL =	.000	IBDAIL =	.000
		RUN	NO, 192/ G	RN/L =	4.95 GR	DIENT INTE	RVAL = -5.0	M/ 5,00			
HÀCH	ALPHA	CH.	CLM	CY	CYN	CBL	CAF	CAB	CL.	œ	L/D
.600	.070	04560	.04440	.07060	02390	.04190	.03960	.03300	04620	.03930	-1.17630
.000	2,660	.04150	.05630	.06830	02290	.01230	.03846	.03500	.03960	.04030	.98270
.005.	4,760	.13800	.03160	.08880	-,02190	.01190	.03470	.03150	,13470	.04600	2.92350
.600	6,690	.23910	.02360	.06270	02090	.01170	.02790	.03070	.23400	.05640	4.14660
.000	9,000	.34960	.01030	.05650	-,02040	.01200	.02290	.03100	.34170	.07740	4,41230
.000	11,120	.46220	.00030	.05600	01970	.01180	.01940	.03230	.44980	.10020	4.15450
.600	13,220	.56710	01130	.05430	01960	.00990	.01670	.05280	,54820	.14600	3.75280
.000	15.300	.65800	01510	.05106	01960	,01040	.01470	.03540	.63080	.18790	3.35620
.600	17,440	.74860	-,01840	,05040	02010	.01110	,01150	.04060	.71070	.23540	3,01860
.400	19,500	.02560	~.01690	.04940	02110	.00900	.09790	.04690	.77570	.26320	2,73860
.000	21,500	.87680	01650	.04690	-,02060	.00630	.00700	.05320	.81320	.32800	2.47900
.000	11.120	.45920	.00060	.05740	02010	.01160	.02000	.03120	.44670	.10820	4,12670
	GRADIENT	.04495	-,00313	-,00093	.00049	00000	-,00125	00037	.04424	.00163	1.00166
		RUN	NO. 151/0	RN/L =	6.21 GRA	DIENT INTER	VAL = -5,0	0/ 5.00			
MACH	ALPHA	ON	CL.H	CY	CYN	CBL	CAF	CAB	Q.	6 0	L/D
.902	.610	-,10620	.06020	.07550	02570	.01210	.04860	.03700	-,10670	.04740	-2.24820
.902	2,710	.00360	.07050	.07120	-,02480	.01190	.04660	.03650	.00140	.04670	.03100
.902	4.940	.12770	.96760	.06720	02390	.01170	.04080	.03570	,12370	.05170	2,39370
.902	7,160	.25730	.04100	,06200	02330	.01210	.03750	.03620	.25060	.06930	3,61330
.902	9.360	.36660	.03090	.05700	02230	.01260	.03630	.03870	.35750	.09780	3.65410
.902	11.560	.48840	.01450	.05090	02090	.01400	.03970	,04030	.47050	.13680	3.43730
.902	13,770	.60670	00240	.04200	01960	.01600	.03930	.04460	.58180	.18310	3,17710
.902	15.940	.71070	01240	.03600	01840	.01550	.03980	.05010	.67240	.23350	2.87890
.902	18,140	. 60530	01370	.04050	02140	.01190	.03810	.05800	.75340	.28710	2.62380
.902	20.270	.87450	00290	.04530	02260	.00600	.03850	.06410	.80700	.33910	2.37950
.902	22.320	.91940	.00740	.03790	- 01400	Oneso	DADWD.				

MAPE THE SAS

PAGF 101

MSSS (FAS) MAR ATP CRB (BICIDIFINE) (WEEL) (VEKIRE)

(R76332) (03 HOV 72)

	REFEREN	CE DATA							PARAMETRIC	DATA	
LARP .	7,4190 80		-	30 IN.				BETA =	,000	CONF.16 =	3,000
LREF #	8,1020 IN	· -	-	000 IN.				RUDDER =	15,000	RUDFLR =	40,000
BREF =	4,0300 TH	. ZMRP		000 IN.				ELEVTR =	.000	OBDELV =	.000
SCALE =	.0040							IBDELV =	.000	AILRON =	.000
								CBDAIL =	.000	IBDAIL =	.000
		RUN	NO. 150/ 0	RN/L =	6.56 GRA	DIENT INTER	RVAL = -5.0	0/ 5.00			
MACH	ALPHA	ON	CLH	CY	CYN	CBL	CAF	CAB	CL.	Ф	L/0
1,196	.780	02780	.00030	.05970	02130	.01160	.06530	.04660	02890	.08490	34130
1.196	2,930	.10470	.04620	.05510	02030	.01220	.08450	.04640	.10020	.08980	1,11650
1,146	8.160	.24210	.01460	.05110	01910	.01160	.08330	.04630	.23350	.10490	2.22600
1.196	7,450	.37740	01760	.04720	01800	.01190	.08350	.04360	.36340	.13160	2.75680
1,196	9,710	.50740	04370	.04190	01710	.01140	.08240	.04300	.48630	.16680	2.91440
1.196	11,970	.63960	06800	.03620	01630	.01050	.08350	.04230	.60840	.21430	2,63640
1,196	14.220	.76660	06750	.03270	01580	.01070	.08320	.04570	.72270	.26980	2.68590
1,196	16,430	.66330	09250	.02680	01430	.01330	.08290	.04990	.80460	.32380	2.48480
1,196	18,710	.96590	09690	.02830	-,01680	08600.	.08390	.05610	.88780	.36950	2,27950
1,196	20,900	1.06800	10810	,02720	-,01710	.00980	.08090	.05680	.96880	.45660	2,12150
1,196	25,000	1.13360	10400	.02360	01550	.01010	.07810	.06000	1,01310	.51500	1.96700
1,196	11,960	.44390	06810	.03600	-,01630	.01040	.08300	.04310	.61260	.21480	2.65090
	THETCHRO	.06163	-,01493	00214	.00047	.00019	00037	00019	.06005	.00228	.67805
		RUN	NO. 149/ 0	RN/L =	6,90 GRA	DIENT INTER	RVAL = -5.0	0/ 5.00			
MACH	ALPHA	ΦN	СV	CY	CYN	CBL	CAF	CAB	α.	co	L/0
1.956	.750	.00360	.01810	.04470	01520	.00830	.08620	.02510	.00250	.08620	.02950
1.956	2.810	.08500	.00430	.04200	01430	.00780	.08480	.02600	.08070	.08890	.90840
1,956	8,020	.17040	01070	.03860	01350	.00750	.08580	.02590	.16220	.10040	1.61520
1,956	7.200	.25060	02460	.03510	01230	.00750	.08460	.02720	.23800	.11540	2,06210
1.956	9.390	.33290	03890	.03250	01150	.00730	.08430	.02720	.31470	.13750	2.20630
1.956	11.570	.40940	05080	.02910	-,01060	.00750	,0829 0	,02570	,36450	.16330	₹.35330
1.956	13.760	,46990	06210	.02670	01000	.00750	.08120	.02590	.45660	.19540	2.33570
1.956	15,950	.57240	07290	.02430	01040	.00798	.07980	.02650	.52840	.23410	2.25710
1.956	18,170	.64610	07760	.02020	-,01010	.00840	.07610	.02650	.59010	.27390	2,15450
1,956	20.300	.71900	08210	.01600	00900	.00870	.07310	.02620	.64890	.31800	2.04020
1,956	22,440	.79630	08930	.01120	00720	.00990	.06900	.02700	.70960	.36780	1,92920
1.956	11.550	.40440	04690	.02930	-,01060	.00690	.08190	.02610	.37980	.16120	2.35510
	GRADIENT	.05913	00665	00130	.00043	00024	00067	.00043	.03760	.00130	.42255

16,910

20.660

GRADIENT

4.959

4,959

-,04470

-.05450

-.00127

.41500

.47930

.01930

-.00050

-.00500

-,00061

-.00010

.00050

.00010

.00300

.00280

.00002

.04720

.04630

-.00086

.00380

.00380

.00003

.37730

.43130

.01816

.17930

.21400

.00006

2.16280

2.10420

2.01530

.27223

MSSS (FAS) MAR ATP CR8 (BICIDIFINI) (WIEI) (VIKIRI)

(R76332) (03 NOV 72)

	REFEREN	ICE DATA							PARAMETRIC	DATA	
SPEP 1	7.4190 80			1930 IN.				BETA =	.000	CONFIG =	3.000
LREP .	2.1020 IN		# .e	2000 IN.				RUDDER =	15,000	RUDFLR =	40,000
BREF .	4.0300 TH	i. ZHRP		0000 IN.				ELEVTR =	.000	OBDELY =	.000
SCALE .	.0040							18DELY =	.000	AILRON =	.000
								CEDAIL =	.000	IBDAIL =	.000
		RUN I	40. 152/ (1 10N/L #	4.12 GRA	DIENT INTER	VAL = -5.0	0/ 5,00			
MACH	ALPHA	ON	CL14	CY	CYN	ŒL	CAF	CAB	a.	co	L/O
8.000	.670	01590	.00030	02779	00890	.09440	.07860	.01230	-,01690	.07640	21560
2,990	2,620	.03460	00460	.02660	00880	.00450	,07790	.01270	.03100	.07650	.39530
2.090	4,700	.08640	0079C	.02510	00860	,00470	.07560	.01290	.08190	.08260	.99040
2.990	6.760	.14510	~.G1260	.02440	00830	.00470	.07450	.01310	.13530	,09110	1.48480
2.990	0.850	.20530	01950	.08200	00790	.00490	.07270	.01320	.19160	.10350	1.85140
2.990	10,920	.26510	-,02560	.01960	00800	.00500	.07030	.01330	.24700	.11920	2.07060
8.990	13,020	.32960	~,05500	.01770	00730	.00520	.06820	.01320	.30600	,14080	2,17270
2.990	15.080	.39798	039e0	.01470	00650	.00520	.06580	.01320	.36710	.16720	2,19560
2.000	17.210	.46960	04820	.01160	00520	.00500	.06280	.01320	.43000	.19900	2,16020
2.490	19,260	.\$4560	-,05780	.00690	60360	.00460	.05980	.01340	.49520	.23660	2.09240
2.990	21,270	.01 880	06870	.00320	00260	.00450	.05720	.01380	.55580	.27780	2,00080
	GRADIENT	.02588	00203	-,00065	.00007	.00007	00074	.00015	.02452	.00105	.29911
		RUN N	D. 151/0	RN/L =	4.81 GRAI	DIENT INTER	VAL = -5.0	0/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	œ	L/0
4.959	.660	03210	-,00960	.01690	00510	.90300	.06700	.00310	03280	.06660	49290
4.959	2.570	.00720	01250	.01680	00520	.00320	.06440	.00300	.00430	.06470	.06740
4.959	4,600	.04400	01460	.01450	-,00470	.00310	.06350	.00320	.03860	.06680	.58050
4.959	6.650	.06510	01820	.01280	00460	.00280	.06150	.00340	.07740	.0000	1.09050
4.959	8,690	,13320	01970	.01040	00340	.00330	.05780	.00340	.12290	.07720	1,59140
4,959	10,720	.18100	-,02460	.00660	00550	.00550	.05480	.00350	.16760	.06750	1.91420
4,959	12.760	.23500	02700	.00808	00500	.00540	.05270	.00360	.21750	.10340	2.10290
4.559	14,800	.26930	03180	.00510	00220	.00550	.05060	.00360	.26670	06251	2.17040
4,959	16.910	.35280	03850	.00230	00100	.00300	.04690	.00370	.32330	.14940	E.1628G

GRADIENT

-,00207

.03536

-.00125

→.00500

.00066

.02140

-.00060

.02390

-.00345

.07000

.00042

1.08310

.01855

.74460

.03505

1.45440

-.04790

MSSS (FAS) NAR ATP ORB (BICIDIFINE) (MFE) (MEET)

			PG 5	S (FA3) NAR	ATP ORB (B1	CIDIFINI) (W	1E1) (V1K1R1))	(R763	33) (83 k	CV 72)
	REFERE	DATA							PARAMETRI	C DATA	
SACT .	7.419G 8			4530 IN.				BETA =	.000	CONFIG =	3.000
UREF #	2.1020 [۱. =	0000 IN.				RUDDER =	15,000	RUDFLR =	40.000
BREF =	4.0300 1	N. ZMRP	* .(0000 IN.				ELEVIR =	.000	CODELY =	.000
SCALE #	.9540							180ELV =	.000	AILRON =	.000
					•			CBDAIL =	.000	IBDAIL =	.000
		RUN	NO. 1937 (RN/L *	4.96 GR	BINI INBION	RVAL = -5.0	00/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	œ	
.599	88,030	.87450	00780	.03110	01570	.00640	.00670	,05450	.80810	.33430	L/0
.599	23,960	.09068	60100	.02530	01340	.00850	.00690	.05740	.61100	.36810	2.41720
.598	26,020	,93740	00030	.03380	01500	.00710	.00760	.05900	.63900	.41820	2.20330
.599	28.070	.96390	00310	.05440	01570	00260	.00600	.06340	.86530	.46840	2,00610
.509	30.120	1,05880	01910	.04370	00760	00440	,00150	.08800	,91500	.53270	1.84730
.599	32.200	1,12249	-,02600	.05550	00550	00230	00110	.06950	.95030	.59730	1.71750
.599	34.280	1,18950	02630	.02400	00420	.00350	00530	,07250	.98590	.66550	1.59100
.593	36.350	1.26500	-,02780	.01730	-,00420	.00600	01260	.07560	1.02620	.73960	1.48130
.599	38,450	1,34180	03390	.01290	00440	.00370	02300	.07680	1,06510	.81630	1,36740
.599	40,510	1.41030	03610	.01290	00320	.00130	05560	.07910	1.09400	.69060	1,22830
.599	42.510	1.46700	04430	.01180	00210	-,00050	04100	07880	1,10910	.96100	1,15410
.599	25.550	1,12230	02470	.03360	00240	00230	00210	.06980	.95060	.59670	1.59300
	THETTAND	.03068	00216	00131	,00074	00021	00237	.00128	.01637	.03131	05941
		RUN N	40. 154/ D	RN/L 2	6.26 GR	DIENT INTER	VAL = -5.0	G/ 5,00			
MACH	ALPHA	CN CN	CLM	CY	CYN	CBL.	CAF	CAB	a.	69	
.900	22.640	.92020	.01370	.03100	01630	.00820	.03980	,06530	.83250	.39390	L/D 2.11310
.900	24,650	.98460	.01150	.02640	01460	.01030	.03680	.06800	.87790	.44740	1.98220
.900	27,000	1.06350	01200.	.02420	01230	.00960	.03340	.07000	.93240	.51260	1.81890
.900	29,160	1.15870	00960	.00950	00920	.01330	.05280	.07000	.99560	.59370	1.67680
.900	31,320	1.25390	00860	~.00920	00600	.02010	.03050	.06850	1.03810	.66760	1.55490
.900	33,470	1,31630	01090	01390	00530	.02160	.02500	.97120	1.08530	.74520	1.45640
.900	35.590	1.39250	01710	00150	00800	.01460	.01010	.07430	1.12640	.81880	
.900	37.720	1.46390	02070	.01040	-,00910	.00420	00480	.07540	1,16080	.01000	1,37560
.900	39.860	1.55470	02730	.01190	-,00468	00120	01520	.07560	1,18740	.97240	1,22110
.900	42.020	1,60350	02960	.00500	00188	00076	01948	.07380	1.20410	1.05900	1,13700
.900	44,000	1.64620	02670	00480	.00000	.00010	02880	.07350	1.20410	1.12290	1.07230
.900	33,460	1.31420	01030	01340	→.00500	.02140	.02390	07000	1 00740		

MSSS (FAS) HAR ATP CRB (BICIDIFINI) (WIEI) (VIKIRI)

	 1000-0-1 11101 (41001)	/ V + I/ V IV + 1	(W1#929)	1 02 NOV 7E	

										, ,	J. 7E .
REPERENCE DATA							PARAMETRIC DAYA				
SACF .	7,4190 84		. 3,	4930 [N.				BETA ≈	.000	CONFIG =	3.000
LREF .	\$.1020 th		= .	0 000 IN.	•			RUDDER =	15.000	RUDFLR =	40,000
BREF .	4.0300 [1	1. ZHRP	= .1	0 000 IN.			•	ELEVTR =	.000	CBDELY =	.000
SCALE .	,9040							180ELV *	.000	ATLRON =	.000
				•				CBDAIL =	.000	IBDAIL =	.000
		RUN 1	NO. 1337	O RN/L =	4.12 GRA	DIENT INTE	RVAL = -5.0	0/ 5.00			
MACH	ALPHA	ON	CLM	CY	CYN	CBL	CAF	CAB	a.	90	L/0
6,990	21,610	.61400	06710	.00430	00220	.00450	.05550	.61390	,54940	.27970	1,96370
2,990	23,600	.66750	07690	.00190	00130	.00430	.05330	.01410	.60750	.32630	1.86160
2,990	25.590	.76860	~.08630	00370	00010	.00390	.05120	.01430	.66920	.38190	1.75210
8,990	28,020	.85260	-,09760	-,90640	.00070	.00380	.04980	.01440	.72940	.44460	1,64040
2,990	80,100	.93710	10590	-,00760	.00050	,00440	.04880	.01430	.78620	.51220	1.53470
2.990	\$2,200	1.02300	11630	00800	-,00128	.00610	.04790	.01420	.84070	.58620	1,43400
R,990	54,540	1,11740	12560	05600	06120	,00720	.04630	.01430	.89640	.66870	1,34050
2,090	36.430	1.20640	-,13860	01420	~,00040	.00720	.04410	.01440	.94600	.75320	1.25600
2,990	36,580	1.30180	15020	02210	.00260	.00596	.04180	.01430	.99150	.84460	1,17390
2.990	40.660	1,38920	-,16080	02820	.00390	. 0 0500	.04050	.01420	1,02740	.93600	1.09750
¥.990	42,660	1,46970	-,16880	03190	.90430	.00450	.03940	.01400	1,05390	1.02500	1,02810
	GRADIENT	.04149	-,00490	-,00162	.00025	.00008	00075	.00000	.02475	.03608	04519
		RUN N	io. 134/ (RNVL =	4.84 GRAI	DIENT INTER	RVAL = -5.0	0/ 5,00			
MACH	ALPHA	CN	CLM.	CY	CYN	CBL.	CAF	CAB	a.	69	L/O
4,959	21,400	.49510	05030	00400	.00040	.00520	.04760	.00320	.44360	.22510	1.97070
4,959	23.350	.56200	05650	00750	.00000	.00310	.04670	,00340	,49740	.26570	1,87190
4,959	25.410	.63690	06470	00760	.00100	.90330	.04720	.00360	.55680	.31690	1.75710
4,959	27,480	.71840	07480	01170	.00100	.00370	.04740	.00370	.61540	.37370	1.64660
4,959	29,540	.79620	08270	01290	.00120	.00420	.04740	.00360	.67100	.43490	1.54260
4.959	31.600	.88356	09510	01630	.00220	.00410	.04750	.00350	.72750	.50350	1,44480
4.959	33.660	.97170	10560	01870	.00270	.00400	.04770	.00350	.78200	.57870	1.35140
4.959	35.720	1,05740	11720	02210	.00320	.00400	.04820	.00350	.83020	.65660	1.26430
4.959	37,620	1.14340	13080	02620	.90350	.08410	.04760	.00350	.87390	.73890	1,18270
4.959	39.860	1.22920	14350	-,02910	.90380	.00410	.04690	.00540	.91330	.82390	1.10840
4.959	41.840	1.31190	15420	03140	.00410	.00440	.04600	.00350	.94660	.90950	1.04080
	GRADIENT	.04053	00516	00135	.00019	.00006	00002	.00000	.02508	.03375	04592

MSSS (FAS) MAR ATP CRB (BICIDIFÍNI) (WIEI) (VIKIRI)

(R76334) (03 NOV 72)

,											
REFERENCE DATA					PARAMETRIC DATA						
MEF .	7.4190 8	9.1H. 354RF	. \$.4	530 IN.				BETA =	.000	CONFIG =	3.000
LREF =	\$.1020 I	N. YHRF	.0	000 IN.				RUDDER *	.000	RUDFLR =	10,000
BREF =	4,0300 1	N. ZHRF	.0	000 tN,				ELEVTR =	.500	CEDELY =	,000
SCALE B	.0040					*		IBDELY =	.000	AILRON =	,600
								CBDAIL =	.000	IBDAIL =	.000
		RUN	NO. 87/ 0	RN/L =	4,96 GRA	DIENT INTER	RVAL = -5.0	00, \$,00			
MACH	ALPHA	CH	QLH	CY	CYN	CBL	CAF	CAB	Q.	60	L/0
.597	11,410	.51240	01930	00510	-,00050	.00590	.00330	.02610	.50160	.10460	4,79160
.597	13,410	.60940	02920	00600	00030	.00340	.00070	.02770	.59260	.14210	4,16970
.597	19,550	.69930	03270	00740	.00000	.00430	50140	.03100	.67420	.18590	3,62570
.597	17,610	.77910	03610	00766	00000.	.00450	00310	.03550	.74350	.23280	3,19380
.597	19,690	.65190	-,05380	00370	00010	00290	-,00490	.04330	.80370	.26250	2,64510
.597	21,740	.66310	02730	-,00550	.00160	00050	80410	.04780	.82180	.32330	2,54210
.597	23,790	.90550	01930	~.00880	.00380	,00070	00760	.05470	.83160	.35830	2,32100
.597	25,610	.95130	02100	-,00500	.00230	.00080	00880	.05760	.86020	.40630	2,11690
.597	27,910	1,00360	02680	.01000	00030	00450	01010	.06190	.89160	.46080	1,93460
.597	29,950	1.06590	03560	.01410	.00570	00970	01400	.06900	.93060	.51980	1,79030
.597	31.910	1,14910	04560	00448	.01070	00570	-,01720	.07160	.98450	,59290	1.66040
.597	21.750	.66370	02620	00250	.00120	00010	00420	.04820	.82230	.32360	2,54110
	GRADIENT	.02795	-,00042	.00060	.00039	00060	~,00089	.00239	.02071	,02298	-,14572
		RUN	NO. 86/ 0	RN/L =	6.27 GRA	DUENT INTER	VAL = -5.0	G/ 5.00			
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CAB	a.	60	L/0
.901	11,840	.51900	78e0 7. -	00560	.00010	.00440	.02330	.03280	.50320	.12930	3,89100
.901	13,940	.62730	02550	-,00840	.00120	.00560	.02420	.03530	.60300	.17460	3.45260
.901	16.120	.75150	05360	01420	.00270	.00650	.02490	.04050	.69580	,22710	3,06350
.901	18.290	.83140	05370	00830	.00130	,00340	.02570	,04770	.76130	.28550	2.73630
.901	20.440	.87900	-,02120	.00010	09000.	-,00520	.02610	.05650	.81450	,33140	2.45730
.90i	22.540	.92540	01030	00230	.00180	00090	.02260	.06280	.84600	.37580	2.25070
.901	24.670	.99350	-,01260	00560	.00310	.00100	.01860	.06710	.89490	.43200	2.07160
.001	26.820	1.08850	02950	00700	.00490	.00140	.01710	.07060	.96360	,50650	1,90230
.901	26,990	1,17630	04070	01420	.00770	.00260	.01350	.07150	1,02230	.56200	1,75640
.901	\$1.170	1.27190	04660	03080	.01080	.00870	.01130	.07320	1.08230	.66820	1,61970
.901	33.200	1.34640	04590	03850	.01270	.01190	.00590	.07460	1.12320	.74230	1,51300
.901	22.530	.92690	01090	00260	.00210	00060	.02070	.06410	.84820	.37430	2.26610
	GRADIENT	.03684	00115	00113	.00053	.00017	00084	,00216	.02735	.02821	10696